STIC Search Results Feedback Form

EIC17000

Questions about the scope or the results of the search? Contact ***the EIC searcher or contact:***

Kathleen Fuller, EIC 1700 Team Leader
308-4290, CP3/4-3D62

Voluntary Results Feedback Form

- *I am an examiner in Workgroup:* ☐ *Example: 1713*
- *Relevant prior art **found**, search results used as follows:*
  - ☐ 102 rejection
  - ☐ 103 rejection
  - ☐ Cited as being of interest.
  - ☐ Helped examiner better understand the invention.
  - ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
  (journal articles, conference proceedings, new product announcements etc.)

- *Relevant prior art **not found:***
  - ☐ Results verified the lack of relevant prior art (helped determine patentability).
  - ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

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Drop off or send completed forms to STIC/EIC1700 CP3/4 3D62

STIC Search Report
EIC 1700

STIC Database Tracking Number: 102419

TO: Preeti Kumar
Location: CP3 9B03
Art Unit : 1751
August 28, 2003

Case Serial Number: 09/838512

From: Kathleen Fuller
Location: EIC 1700
CP3/4 3D62
Phone: 308-4290

Kathleen.Fuller@uspto.gov

Search Notes

It is really not possible to do a structure search on theses claims as the product of the modification of starch with the strucuture fragments in the claims is not structurally indexed by Chemical Abstracts. I searched for modification of starch or amylose or amylopectin and the utility. I also used the starting compounds used for modification of the starch in the application to search for references on modification of starch.

Access DB# 102419

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Preeti Kumar Examiner #: 79016 Date: 8/26/03.
Art Unit: 1751. Phone Number 305-0178 Serial Number: 09/838,512.
Mail Box and Bldg/Room Location: CP3 9B03 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: See Attached Bib Sheet.

Inventors (please provide full names): "

Earliest Priority Filing Date: 4/20/2000

***For Sequence Searches Only** Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Please search claims 1-5.

Thank you.

Preeti
305-0178
CP3-9B03.

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****

STAFF USE ONLY	Type of Search		Vendors and cost where applicable	
Searcher: K. Fuller	NA Sequence (#)		STN	✓
Searcher Phone #:	AA Sequence (#)		Dialog	
Searcher Location:	Structure (#)	1	Questel/Orbit	
Date Searcher Picked Up: 8/28/03	Bibliographic		Dr.Link	
Date Completed:	Litigation		Lexis/Nexis	
Searcher Prep & Review Time: 30	Fulltext		Sequence Systems	
Clerical Prep Time:	Patent Family		WWW/Internet	
Online Time: 50	Other		Other (specify)	

PTO-1590 (8-01)

=> FILE REG
FILE 'REGISTRY' ENTERED AT 16:51:04 ON 27 AUG 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 25 AUG 2003 HIGHEST RN 573649-48-6
DICTIONARY FILE UPDATES: 25 AUG 2003 HIGHEST RN 573649-48-6

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> FILE HCAPLUS
FILE 'HCAPLUS' ENTERED AT 16:51:14 ON 27 AUG 2003
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FILE COVERS 1907 - 27 Aug 2003 VOL 139 ISS 9
FILE LAST UPDATED: 26 Aug 2003 (20030826/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> D QUE
L6 10 SEA FILE=REGISTRY ABB=ON (10126-68-8/BI OR 28519-06-4/BI OR 3033-77-0/BI OR 34214-79-4/BI OR 4860-03-1/BI OR 544-10-5/BI OR 79-11-8/BI OR 9005-25-8/BI OR 9005-82-7/BI OR 9037-22-3/BI)
L7 3 SEA FILE=REGISTRY ABB=ON L6 AND (STARCH OR AMYLOSE OR AMYLPECTIN)
L8 7 SEA FILE=REGISTRY ABB=ON L6 NOT L7
L12 2 SEA FILE=REGISTRY ABB=ON L7 AND (AMYLOSE OR AMYLPECTIN)
L13 1 SEA FILE=REGISTRY ABB=ON L7 NOT L12
L14 135900 SEA FILE=HCAPLUS ABB=ON L13 OR STARCH

KATHLEEN FULLER EIC 1700/PARKER LAW 308-4290

L16	71274	SEA FILE=HCAPLUS ABB=ON	L12 OR AMYLOSE? OR AMYLOPECTIN?
L17	4309	SEA FILE=HCAPLUS ABB=ON	L16(L)(RCT OR RACT)/RL
L19	96	SEA FILE=HCAPLUS ABB=ON	L14(L)POF/RL(L)(PREP OR IMF OR SPN)/RL
L20	5	SEA FILE=HCAPLUS ABB=ON	L17 AND L19
L21	2032	SEA FILE=HCAPLUS ABB=ON	(L14 OR L16) AND POF/RL
L22	110	SEA FILE=HCAPLUS ABB=ON	L21 AND FABRIC?
L23	10297	SEA FILE=HCAPLUS ABB=ON	L8
L24	161	SEA FILE=HCAPLUS ABB=ON	L23(L)L14
L25	1	SEA FILE=HCAPLUS ABB=ON	L22 AND L24
L26	8	SEA FILE=HCAPLUS ABB=ON	L24 AND FABRIC?
L27	492	SEA FILE=HCAPLUS ABB=ON	L16(L)23
L28	2	SEA FILE=HCAPLUS ABB=ON	L27 AND FABRIC?
L29	7	SEA FILE=HCAPLUS ABB=ON	L20 OR L25 OR L28
L30	1332	SEA FILE=HCAPLUS ABB=ON	L14(L)POF/RL
L31	1169	SEA FILE=HCAPLUS ABB=ON	L16 AND L30
L32	55	SEA FILE=HCAPLUS ABB=ON	L31 AND FABRIC?
L33	2	SEA FILE=HCAPLUS ABB=ON	L32 AND DETERGENT?/SC,SX
L34	12	SEA FILE=HCAPLUS ABB=ON	L31 AND DETERGENT?/SC,SX
L35	1000	SEA FILE=HCAPLUS ABB=ON	L14(L)POLYMER?(L)MODIF?
L36	601	SEA FILE=HCAPLUS ABB=ON	L35 AND L12
L37	15	SEA FILE=HCAPLUS ABB=ON	L36 AND DETERGENT?/SC,SX
L38	6	SEA FILE=HCAPLUS ABB=ON	L36 AND L23
L39	74	SEA FILE=HCAPLUS ABB=ON	L19 AND L16
L40	1	SEA FILE=HCAPLUS ABB=ON	L39 AND DETERGENT?/SC,SX
L41	41	SEA FILE=HCAPLUS ABB=ON	L20 OR L25 OR L26 OR L28 OR L29 OR L33 OR L34 OR L37 OR L38 OR L40

=> D L41 ALL 1-41 HITSTR

L41 ANSWER 1 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2003:414277 HCAPLUS
DN 138:403356
TI Soluble sachet containing effervescent base material
IN Cowan, Alison; Horne, Graham Robert; Davies, Craig Joseph; Fullman, Jason Ronald
PA PZ Cussons (International) Limited, UK
SO Brit. UK Pat. Appl., 13 pp.
CODEN: BAXXDU
DT Patent
LA English
IC ICM C11D017-00
ICS A61K007-50; C11D003-00
CC 46-6 (Surface Active Agents and **Detergents**)
Section cross-reference(s): 62
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI GB 2382350	A1	20030528	GB 2002-21861	20020920
PRAI GB 2001-22665	A	20010920		

AB A sachet formed from a water sol. plastic material preferably for addn. to bath water, comprises a personal care compn., which includes at least one surfactant together with an effervescent base material, wherein the base material liberates a gas when in contact with a sufficient amt. of water. Typically, the base material comprises a carbonate and/or a bicarbonate, e.g. sodium bicarbonate in combination with an acid, such as citric acid. The base material and the surfactant(s) may be provided in powd. or

granular form. The surfactant(s) may be anionic, nonionic, cationic, amphoteric or mixts. thereof. The plastics material may be polyvinyl alc., polyvinyl pyrrolidine, a starch-based polymer, cellulose, or an alginate.

ST sodium bicarbonate citric acid effervescent material bath tablet; polyvinyl alc sachet bath prepn

IT Bath preparations
(bubble, tablet; in a sol. sachet)

IT Detergents
(cleaning compns.; sol. sachet contg. effervescent material in bath prepn.)

IT Effervescent materials
(in sol. sachet for bath prepn.)

IT 9002-89-5 9003-43-4, Polyvinyl pyrrolidine 9004-34-6, Cellulose, uses **9005-25-8D, Starch**, based-polymer 9005-32-7D, Alginic acid, deriv.
RL: **POF (Polymer in formulation)**; TEM (Technical or engineered material use); USES (Uses)
(sol. sachet contg. effervescent material in bath prepn.)

IT 50-21-5, Lactic acid, uses 64-18-6, Formic acid, uses 69-72-7, Salicylic acid, uses 77-92-9, Citric acid, uses 79-14-1, Glycolic acid, uses 87-69-4, Tartaric acid, uses 110-16-7, Maleic acid, uses 110-44-1, Sorbic acid 144-55-8, Sodium bicarbonate, uses 298-14-6, Potassium bicarbonate 471-34-1, Calcium carbonate, uses 497-19-8, Sodium carbonate, uses 506-87-6, Ammonium carbonate 533-96-0, Sodium sesquicarbonate 546-93-0, Magnesium carbonate 584-08-7, Potassium carbonate 1066-33-7, Ammonium bicarbonate 101508-09-2, Potassium sesquicarbonate 103346-15-2
RL: TEM (Technical or engineered material use); USES (Uses)
(sol. sachet contg. effervescent material in bath prepn.)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Anon; GB 0955896 A
(2) Anon; WO 2002059242 A2 HCAPLUS
(3) Anon; GB 2157705 A HCAPLUS
(4) Anon; GB 2375515 A

IT **9005-25-8D, Starch**, based-polymer
RL: **POF (Polymer in formulation)**; TEM (Technical or engineered material use); USES (Uses)
(sol. sachet contg. effervescent material in bath prepn.)

RN 9005-25-8 HCAPLUS

CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 2 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2003:319439 HCAPLUS

DN 138:323058

TI Contaminant-tolerant foaming additive containing alcohol ether sulfates

IN Munoz, Pablo; Harris, William Franklin; Acker, David Brian; Siegel, Joel Farrell

PA Benchmark Research & Technology, Inc., USA

SO U.S. Pat. Appl. Publ., 13 pp.
CODEN: USXXCO

DT Patent

LA English

IC ICM C11D017-00

NCL 510407000; 510424000; 510426000; 510475000; 510506000

CC 46-4 (Surface Active Agents and **Detergents**)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003078180	A1	20030424	US 2001-39591	20011024
PRAI	US 2001-39591		20011024		

OS MARPAT 138:323058

AB A non-aq. foamer compn. comprises: (a) an alc. ether sulfate salt; (b) a water miscible solvent; and (c) a polymer selected from the group consisting of natural polymers, modified natural polymers, synthetic polymers, and combinations thereof. The compn. functions in a wide pH range and under conditions of salt, alc., and hydrocarbon contamination.

ST alc ether sulfate solvent polymer foaming compn

IT Alcohols, uses
Esters, uses
Glycols, uses
Ketones, uses
RL: NUU (Other use, unclassified); USES (Uses)
(aliph., water miscible solvent; contaminant-tolerant foaming additive contg. alc. ether sulfates)

IT Foaming agents
(contaminant-tolerant foaming additive contg. alc. ether sulfates)

IT Glycols, uses
RL: NUU (Other use, unclassified); USES (Uses)
(ethers, aliph., water miscible solvent; contaminant-tolerant foaming additive contg. alc. ether sulfates)

IT Ethers, uses
RL: NUU (Other use, unclassified); USES (Uses)
(glycol, aliph., water miscible solvent; contaminant-tolerant foaming additive contg. alc. ether sulfates)

IT Imines
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(polyimines; contaminant-tolerant foaming additive contg. alc. ether sulfates)

IT Polyoxyalkylenes, uses
RL: NUU (Other use, unclassified); USES (Uses)
(water miscible solvent; contaminant-tolerant foaming additive contg. alc. ether sulfates)

IT Solvents
(water-miscible; contaminant-tolerant foaming additive contg. alc. ether sulfates)

IT 9000-01-5, Gum arabic 9000-07-1, Carrageenan 9000-28-6, Gum ghatti 9000-30-0, Guar gum 9000-36-6, Gum karaya 9000-40-2, Locust bean gum 9000-65-1, Gum tragacanth 9000-69-5, Pectin 9002-89-5, Polyvinylalcohol 9003-01-4, Poly(acrylic acid) 9004-30-2, Carboxymethyl hydroxyethylcellulose 9004-62-0, Hydroxyethylcellulose **9005-25-8, Starch**, uses 9005-32-7, Alginic acid 9042-14-2, Dextransulfate 11138-66-2, Xanthan gum 24991-23-9 25085-79-4, Ethylene-maleic acid copolymer 25087-26-7, Poly(methacrylic acid) 25300-64-5, Maleic acid-styrene copolymer 25513-46-6, Poly(L-glutamic acid) 26101-52-0, Poly(vinylsulfonic acid) 38193-45-2, Butylvinylether-maleic acid copolymer 39300-88-4, Tara gum 39421-75-5, Hydroxypropyl guar 39454-79-0, Carboxymethyl hydroxypropyl guar 41315-86-0, Ethylvinylether-maleic acid copolymer 50851-57-5, Poly(styrenesulfonic acid) 96949-22-3, Welan gum 143409-53-4
RL: **POF (Polymer in formulation)**; TEM (Technical or engineered material use); USES (Uses)

(contaminant-tolerant foaming additive contg. alc. ether sulfates)
IT 512807-93-1, AES 100
RL: TEM (Technical or engineered material use); USES (Uses)
(contaminant-tolerant foaming additive contg. alc. ether sulfates)
IT 56-81-5, Glycerine, uses 57-55-6, Propylene glycol, uses 64-17-5, Ethanol, uses 67-56-1, Methanol, uses 67-63-0, Isopropanol, uses 67-64-1, Acetone, uses 68-12-2, Dimethylformamide, uses 71-23-8, Propanol, uses 71-36-3, Butanol, uses 78-83-1, Isobutanol, uses 78-93-3, Methyl ethyl ketone, uses 96-22-0, Diethyl ketone 97-99-4 98-00-0, 2-Furanmethanol 107-21-1, Ethylene glycol, uses 107-41-5, Hexylene glycol 109-86-4, Ethylene glycol methyl ether 109-99-9, Tetrahydrofuran, uses 110-49-6, Ethylene glycol methyl ether acetate 110-63-4, Butylene glycol, uses 110-71-4, Ethylene glycol dimethyl ether 110-80-5, Ethylene glycol ethyl ether 111-46-6, Diethylene glycol, uses 111-76-2, Ethylene glycol butyl ether 111-77-3, Diethylene glycol methyl ether 111-96-6, Diethylene glycol dimethyl ether 112-27-6, Triethylene glycol 112-34-5, Diethylene glycol butyl ether 112-35-6 112-60-7, Tetraethylene glycol 123-42-2, Diacetone alcohol 123-86-4, Butyl acetate 141-78-6, Ethyl acetate, uses 143-22-6 629-38-9, Diethylene glycol methyl ether acetate 7382-32-3 9003-13-8, Polyoxypropylene butyl ether 9004-77-7, Polyoxyethylene butyl ether 13343-98-1 24800-44-0, Tripropylene glycol 25265-71-8, Dipropylene glycol 25322-68-3, Polyethylene glycol 25322-69-4, Polypropylene glycol 25498-49-1, Tripropylene glycol methyl ether 34590-94-8, Dipropylene glycol methyl ether 35884-42-5, Dipropylene glycol butyl ether 55934-93-5, Tripropylene glycol butyl ether 106392-12-5, Ethylene oxide propylene oxide block copolymer 111109-77-4, Dipropylene glycol dimethyl ether
RL: NUU (Other use, unclassified); USES (Uses)
(water miscible solvent; contaminant-tolerant foaming additive contg. alc. ether sulfates)
IT **9005-25-8, Starch,** uses
RL: **POF (Polymer in formulation)**; TEM (Technical or engineered material use); USES (Uses)
(contaminant-tolerant foaming additive contg. alc. ether sulfates)
RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 3 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2003:271590 HCAPLUS
DN 138:288665
TI Water-soluble films for packaging of alkaline substances
IN Isozaki, Takanori; Fujiwara, Naoki; Higasa, Shintaro
PA Kuraray Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM B65D065-46
ICS C08F008-12; C08F216-06; C08J005-18; C08L029-04; C08F226-00; C08L001-00
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 5, **46**
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI JP 2003104436 A2 20030409 JP 2001-302361 20010928
PRAI JP 2001-302361 20010928

AB The films for packaging of alk. substances such as pesticides and detergents, comprise **modified** vinyl alc. **polymers** having 1-10 mol% N-vinylamide monomer units and sapon. degree 82-99.5 mol%, and optionally contain carbohydrates. Thus, a film comprising sapond. vinyl acetate-N-vinylcaprolactam copolymer (N-vinylcaprolactam unit content 6.0 mol%, sapon. degree 98.4 mol%) 100, glycerin 15, etherified **starch** 20, and talc 5 parts showed Young's modulus 2.9 kg/mm2, tensile strength 2.4 kg/cm2, and good biodegradability and dissolved in H2O at 10.degree. within 67 and 70 s before and after packaging of an soln. (pH 11) contg. 1 wt.% glycerin-ethanolamine mixt. at 40.degree. for 4 wk.

ST water soluble film modified polyvinyl alc; sapond vinyl acetate vinylcaprolactam copolymer film; alkali packaging vinyl alc polymer film; carbohydrate polyvinyl alc biodegradable packaging film; detergent pesticide packaging alkali resistance film

IT Carbohydrates, uses
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(additive for improved water soly.; water-sol. vinyl alc.-vinylamide copolymer films for packaging of alk. substances)

IT Chemically resistant materials
(alkali-resistant; water-sol. vinyl alc.-vinylamide copolymer films for packaging of alk. substances)

IT Packaging materials
(biodegradable, films; water-sol. vinyl alc.-vinylamide copolymer films for packaging of alk. substances)

IT Packaging materials
(films; water-sol. vinyl alc.-vinylamide copolymer films for packaging of alk. substances)

IT Biodegradable materials
(packaging, films; water-sol. vinyl alc.-vinylamide copolymer films for packaging of alk. substances)

IT Detergents
Pesticides
Plastic films
(water-sol. vinyl alc.-vinylamide copolymer films for packaging of alk. substances)

IT Bases, miscellaneous
RL: MSC (Miscellaneous)
(water-sol. vinyl alc.-vinylamide copolymer films for packaging of alk. substances)

IT 99-20-7, Trehalose **9005-25-8**, Corn starch, uses
9005-25-8D, Starch, ether or oxidized 66230-82-8, MS 3800
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(additive for improved water soly.; water-sol. vinyl alc.-vinylamide copolymer films for packaging of alk. substances)

IT 25086-89-9DP, Vinyl acetate-N-vinyl-2-pyrrolidone copolymer, sapond.
27399-70-8DP, Vinyl acetate-N-vinylcaprolactam copolymer, sapond.
28928-24-7DP, N-Methyl-N-vinylacetamide-vinyl acetate copolymer, sapond.
80512-26-1DP, N-Vinylacetamide-vinyl acetate copolymer, sapond.
108941-57-7DP, Vinyl acetate-N-vinylformamide copolymer, sapond.
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(water-sol. vinyl alc.-vinylamide copolymer films for packaging of alk. substances)

IT 141-43-5, Ethanolamine, miscellaneous
RL: MSC (Miscellaneous)
(water-sol. vinyl alc.-vinylamide copolymer films for packaging of alk. substances)
IT **9005-25-8**, Corn starch, uses **9005-25-8D**, Starch, ether or oxidized
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(additive for improved water soly.; water-sol. vinyl alc.-vinylamide copolymer films for packaging of alk. substances)
RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 4 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2003:113002 HCAPLUS
DN 138:154400
TI Deodoring and antiaggregation paste compositions when packaged in pliable bags and containers
IN Yoshida, Yasushi; Fujiu, Akira
PA Kao Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM D06M013-184
ICS D06M013-224
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 40
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003041483	A2	20030213	JP 2001-227514	20010727
PRAI	JP 2001-227514		20010727		

AB The title compns. comprise: (A) a **polymer** contg. units from vinyl acetate and at least one of unsatd. carboxylic acids or their lower alc. esters, (B) nonionic surfactant, and (C) fragrance substances, and the bags and containers have all light transmittance at 200-800 nm .ltoreq.30%. Thus, emulsion **polymg**. cationic-**modified starch**, with vinyl acetate, acrylic acid and N,N-dimethylacrylamide gave an A, 65 parts of which was mixed with 3 parts propylene glycol, 0.2 parts KM 97 (silicone) and C to give a title compn. storaged in a bag laminated from nylon, LDPE and aluminum foil, wherein C contains: undecyl aldehyde, amyl salicylate, coumarin, cyclamen aldehyde, .alpha.-ionone, lavender oil, rose oxide, rosemary oil, and alcs.
ST vinyl acetate acrylic acid starch copolymer paste compn; fragrance substance pliable bag deodoring antiaggregation paste compn
IT Alcohols, uses
RL: MOA (Modifier or additive use); USES (Uses)
(aliph., in fragrance substances; in deodoring and antiaggregation paste compns. when packaged in pliable bags and containers)
IT Pastes
(deodoring and antiaggregation paste compns. when packaged in pliable

bags and containers)
IT Laminated materials
(for pliable bags or containers for packaging deodoring and antiaggregation paste compns.)
IT Deodorants
Odor and Odorous substances
(in deodoring and antiaggregation paste compns. when packaged in pliable bags and containers)
IT Paper
(in pliable bag formulations for packaging deodoring and antiaggregation paste compns.)
IT Polyamides, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(in pliable bag formulations for packaging deodoring and antiaggregation paste compns.)
IT Essential oils
RL: MOA (Modifier or additive use); USES (Uses)
(lavender, in fragrance substances; in deodoring and antiaggregation paste compns. when packaged in pliable bags and containers)
IT Essential oils
RL: MOA (Modifier or additive use); USES (Uses)
(lemon, in fragrance substances; in deodoring and antiaggregation paste compns. when packaged in pliable bags and containers)
IT Essential oils
RL: MOA (Modifier or additive use); USES (Uses)
(lime, in fragrance substances; in deodoring and antiaggregation paste compns. when packaged in pliable bags and containers)
IT Bags
Containers
(pliable; for packaging deodoring and antiaggregation paste compns.)
IT Essential oils
RL: MOA (Modifier or additive use); USES (Uses)
(rosemary, in fragrance substances; in deodoring and antiaggregation paste compns. when packaged in pliable bags and containers)
IT 2680-03-7, N,N-Dimethylacrylamide
RL: MOA (Modifier or additive use); USES (Uses)
(crosslinking agent for base compn.; in deodoring and antiaggregation paste compns. when packaged in pliable bags and containers)
IT 7429-90-5, Aluminum, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(foil; in pliable bag formulations for packaging deodoring and antiaggregation paste compns.)
IT 79-10-7DP, Acrylic acid, **polymer** with trimethylglycidylammonium chloride-**modified starch** and vinyl acetate
108-05-4DP, Vinyl acetate, **polymer** with trimethylglycidylammonium chloride-**modified starch** and acrylic acid **3033-77-0DP**, 1-(Trimethylammonio)-2,3-epoxypropane chloride, reaction product with starch, polymer with acrylic acid and vinyl acetate **9005-25-8DP**, Starch, reaction product with trimethylglycidylammonium chloride, polymer with acrylic acid and vinyl acetate
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(in deodoring and antiaggregation paste compns. when packaged in pliable bags and containers)
IT 60-12-8, Phenylethyl alcohol 78-70-6, Linalool 80-54-6, Lilial 88-41-5, o-tert-Butylcyclohexyl acetate 91-64-5, Coumarin 101-86-0, .alpha.-Hexylcinnamic aldehyde 103-95-7, Cyclamen aldehyde 104-67-6,

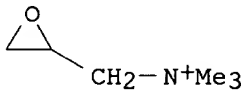
.gamma.-Undecalactone 106-22-9, Citronellol 106-24-1, Geraniol 106-25-2, Nerol 112-44-7, Undecyl aldehyde 112-45-8, Undecylene aldehyde 112-54-9, Dodecyl aldehyde 115-95-7, Linalyl acetate 118-58-1, Benzyl salicylate 120-51-4, Benzyl benzoate 120-57-0, Heliotropin 121-33-5, Vanillin 127-41-3, .alpha.-Ionone 140-11-4, Benzyl acetate 142-19-8, Allyl heptanoate 488-10-8, (Z)-Jasmone 2050-08-0, Amyl salicylate 5392-40-5, Citral 6413-10-1, Fructone 8000-41-7, Terpineol 8007-35-0, Terpinyl acetate 16409-43-1, Rose oxide 32210-23-4, p-tert-Butylcyclohexyl acetate 43052-87-5, .alpha.-Damascone 53219-21-9, Dihydromyrcenol 55066-48-3, Phenoxanol 62053-09-2, Decenol 65405-77-8, cis-3-Hexenyl salicylate 68039-49-6, Tripral 80449-98-5, Liral 139504-68-0, Amber core 176201-49-3, Poarenet 177771-82-3, Ambroxan 177771-94-7, Magnol
RL: MOA (Modifier or additive use); USES (Uses)
(in fragrance substances; in deodoring and antiaggregation paste compns. when packaged in pliable bags and containers)

IT 9002-88-4, Polyethylene
RL: TEM (Technical or engineered material use); USES (Uses)
(in pliable bag formulations for packaging deodoring and antiaggregation paste compns.)

IT 57-55-6, Propylene glycol, uses
RL: NUU (Other use, unclassified); USES (Uses)
(nonionic surfactant; in deodoring and antiaggregation paste compns. when packaged in pliable bags and containers)

IT **3033-77-0DP**, 1-(Trimethylammonio)-2,3-epoxypropane chloride, reaction product with starch, polymer with acrylic acid and vinyl acetate
9005-25-8DP, Starch, reaction product with trimethylglycidylammonium chloride, polymer with acrylic acid and vinyl acetate
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(in deodoring and antiaggregation paste compns. when packaged in pliable bags and containers)

RN 3033-77-0 HCAPLUS
CN Oxiranemethanaminium, N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 5 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2003:111093 HCAPLUS
DN 138:153961
TI Water soluble polymer dispersions and their production method
IN Takeda, Hisao; Sugiyama, Toshiaki
PA Hymo Corpraton, Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08L101-14
ICS C08F002-20; C08L001-08; C08L003-02; C08L003-04; C08L005-08
CC 35-4 (Chemistry of Synthetic High Polymers)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003041137	A2	20030213	JP 2001-226033	20010726
PRAI	JP 2001-226033		20010726		

AB Title dispersions comprise .gtoreq.1 water sol. polymer particles with particle diam. .ltoreq.100 .mu.m selected from cationic, nonionic, and amphoteric polymers and aq. salt soln.-sol. natural polymers as dispersing agents. Thus, 59.0 g aq. 50% acrylamide and 100.4 g aq. 80% acryloyloxyethyltrimethylammonium chloride were polymd. in the presence of 30.3 g aq. 20% chitosan with mol. wt. 500,000 and cation equiv. 4.44 meq/g to give an aq. polymer dispersion with polymer particle diam. .ltoreq.10 .mu.m, viscosity 400 mPa-s, and wt. av. mol. wt. 10,000,000.

ST water soluble polymer dispersions prepn; acryloyloxyethyltrimethylammonium chloride acrylamide copolymer prepn chitosan dispersant

IT Polyelectrolytes
(amphoteric; prepn. of water sol. polymer dispersions in presence of dispersing agents)

IT Polyelectrolytes
(cationic, optionally dispersing agents; prepn. of water sol. polymer dispersions in presence of dispersing agents)

IT Dispersing agents
(prepn. of water sol. polymer dispersions in presence of dispersing agents)

IT Polymers, preparation
RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)
(water-sol.; prepn. of water sol. polymer dispersions in presence of dispersing agents)

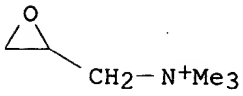
IT 2382-43-6D, 2-Hydroxypropyltrimethylammonium chloride, starch derivs. **3033-77-0D**, Glycidyltrimethylammonium chloride, natural type polymer derivs. 9004-34-6D, Cellulose, derivs. **9005-25-8D**, **Starch**, cationically **modified** 9012-76-4, Chitosan 9012-76-4D, Chitosan, glycidyltrimethylammonium chloride derivs. 9032-42-2, Methylhydroxy ethylcellulose
RL: MOA (Modifier or additive use); USES (Uses)
(dispersing agent; prepn. of water sol. **polymer** dispersions in presence of dispersing agents)

IT 35429-19-7P, Acrylamide-methacryloyloxyethyltrimethylammonium chloride copolymer 69418-26-4P, Acrylamide-acryloyloxyethyltrimethylammonium chloride copolymer 75150-29-7P, Acrylamide-acryloylaminopropyltrimethylammonium chloride copolymer 101060-97-3P 108388-79-0P 109578-73-6P, Acrylamide-acrylic acid-acryloyloxyethyltrimethylammonium chloride copolymer 140668-04-8P 160767-52-2P 496809-90-6P 496810-06-1P
RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)
(prepn. of water sol. polymer dispersions in presence of dispersing agents)

IT 4584-46-7D, 2-Chloroethyldimethylammonium chloride, starch derivs.
RL: MOA (Modifier or additive use); USES (Uses)
(prepn. of water sol. polymer dispersions in presence of dispersing agents)

IT **3033-77-0D**, Glycidyltrimethylammonium chloride, natural type

polymer derivs. **9005-25-8D, Starch,** cationically **modified**
RL: MOA (Modifier or additive use); USES (Uses)
(dispersing agent; prepn. of water sol. **polymer** dispersions in presence of dispersing agents)
RN 3033-77-0 HCAPLUS
CN Oxiranemethanaminium, N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 6 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2002:961425 HCAPLUS
DN 138:26132
TI Procedure for the antisoiling treatment of textile and nontextile materials
IN Hamers, Christoph; Boeckh, Dieter; Schmidt, Kati
PA BASF AG, Germany
SO Ger. Offen., 18 pp.
CODEN: GWXXBX
DT Patent
LA German
IC ICM D06B009-04
ICS C11D003-37
CC 46-5 (Surface Active Agents and **Detergents**)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10128900	A1	20021219	DE 2001-10128900	20010615
	WO 2002103106	A1	20021227	WO 2002-EP6511	20020613

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI DE 2001-10128900 A 20010615
AB Textile and nontextile surfaces are rendered resistant to soiling by treatment with dispersions of hydrophilic particles (size 10-2000 nm) based on **polymers** based on (A) 60-100% .gtoreq.1 carboxyl group-contg., ethylenically unsatd. monomer or their salts, (B) 0-40%

.gtoreq.1 water-insol. monoethylenically unsatd. monomer, (C) 0-25% .gtoreq.1 monomer having sulfonic acid and/or phosphonic acid groups or their salts, (D) 0-30% .gtoreq.1 water-sol. nonionic monomer and contg. anionic, nonionic and(or) betaine emulsifiers or protective colloids, with the surface of the particles being **modified** by .gtoreq.1 cationic **polymer**, .gtoreq.1 multivalent metal ion, and(or) .gtoreq.1 cationic surfactant. A typical dispersion for spraying laundered fabrics was prepd. by dilg. a 14.7% solids aq. 17:55:77.5 acrylic acid-Et acrylate-methacrylic acid copolymer dispersion with particle size 254 nm and contg. oxidized **starch** emulsifier with 2000 ppm water of pH 4 and adding an equiv. amt. of a soln. contg. 200 ppm polyethylenimine (mol. wt. 1,000,000) in pH-4 water.

ST antisoiling agent fabric cationic **modified** acrylic acid copolymer nanoparticle; oxidized **starch** emulsifier cationic acrylic nanoparticle antisoiling agent fabric; polyethylenimine **modified** acrylic **polymer** nanoparticle antisoiling agent fabric; ethyl acrylate copolymer cationic **modified** nanoparticle antisoiling agent fabric; methacrylic acid copolymer cationic **modified** nanoparticle antisoiling agent fabric

IT Emulsifying agents
(anionic; in dispersions for antisoiling treatment of textiles and nontextiles with cationically modified acrylic polymer nanoparticles)

IT Laundering
Nanoparticles
(antisoiling treatment of textiles and nontextiles with dispersions of cationically modified acrylic polymer nanoparticles)

IT Polyamines
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(cationic modifier; antisoiling treatment of textiles and nontextiles with dispersions of cationically modified acrylic polymer nanoparticles)

IT Surfactants
(cationic, cationic modifier; antisoiling treatment of textiles and nontextiles with dispersions of cationically modified acrylic polymer nanoparticles)

IT Betaines
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(emulsifiers; in dispersions for antisoiling treatment of textiles and nontextiles with cationically modified acrylic polymer nanoparticles)

IT Detergents
(laundry; laundry detergents contg. antisoiling agents based on cationically modified acrylic polymer nanoparticles)

IT Emulsifying agents
(nonionic; in dispersions for antisoiling treatment of textiles and nontextiles with cationically modified acrylic polymer nanoparticles)

IT Colloids
(protective; in dispersions for antisoiling treatment of textiles and nontextiles with cationically modified acrylic polymer nanoparticles)

IT 30351-73-6P, Acrylic acid-ethyl acrylate-methacrylic acid copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(antisoiling treatment of textiles and nontextiles with dispersions of cationically modified acrylic polymer nanoparticles)

IT 7429-90-5, Aluminum, uses 7439-95-4, Magnesium, uses 7440-39-3, Barium, uses 7440-66-6, Zinc, uses 9002-98-6, Polyethylenimine 10043-52-4, Calcium chloride, uses 26062-79-3,

Polydiallyldimethylammonium chloride
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(cationic modifier; antisoiling treatment of textiles and nontextiles with dispersions of cationically modified acrylic polymer nanoparticles)

IT **9005-25-8D, Starch**, oxidized
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(emulsifier; in dispersions for antisoiling treatment of textiles and nontextiles with cationically **modified** acrylic **polymer** nanoparticles)

IT **9005-25-8D, Starch**, oxidized
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(emulsifier; in dispersions for antisoiling treatment of textiles and nontextiles with cationically **modified** acrylic **polymer** nanoparticles)

RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 7 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2002:961424 HCAPLUS
DN 138:26131
TI Procedure for the antisoiling treatment of textile and nontextile materials
IN Hamers, Christoph; Boeckh, Dieter; Schmidt, Kati
PA BASF AG, Germany
SO Ger. Offen., 18 pp.
CODEN: GWXXBX
DT Patent
LA German
IC ICM D06L001-12
CC 46-5 (Surface Active Agents and **Detergents**)
Section cross-reference(s): 40
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10128894	A1	20021219	DE 2001-10128894	20010615
	WO 2002103105	A2	20021227	WO 2002-EP6628	20020614
	WO 2002103105	A3	20030501		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI DE 2001-10128894 A 20010615
AB Textile and nontextile surfaces are rendered resistant to soiling by treatment with dispersions of hydrophilic particles (size 10-2000 nm) based on crosslinked **polymers** based on (A) 60-99.99% .gtoreq.1 carboxyl group-contg., ethylenically unsatd. monomers or their salts, (B)

0-40% .gtoreq.1 water-insol. monoethylenically unsatd. monomer, (C) 0.01-30% .gtoreq.1 monomer having >1 ethylenically unsatd. groups, (D) 0-25% .gtoreq.1 monomers having sulfonic acid and/or phosphonic acid groups or their salts, (E) 0-30% .gtoreq.1 water-sol. nonionic monomer and contg. anionic, nonionic and(or) betaine emulsifiers or protective colloids, with the surface of the particles being **modified** by .gtoreq.1 cationic **polymer**, .gtoreq.1 multivalent metal ion, and(or) .gtoreq.1 cationic surfactant. A typical dispersion for spraying laundered fabrics was prepd. by dilg. a 14.7% solids aq. 17:2.1:3.1:132 acrylic acid-allyl methacrylate-Et acrylate-methacrylic acid copolymer dispersion with particle size 134 nm and contg. oxidized **starch** emulsifier with 2000 ppm water of pH 4 and adding an equiv. amt. of a soln. contg. 200 ppm polyethylenimine (mol. wt. 1,000,000) in pH-4 water.

ST antisoiling agent fabric cationic **modified** acrylic acid copolymer nanoparticle; oxidized **starch** emulsifier cationic acrylic nanoparticle antisoiling agent fabric; polyethylenimine **modified** acrylic **polymer** nanoparticle antisoiling agent fabric; ethyl acrylate copolymer cationic **modified** nanoparticle antisoiling agent fabric; methacrylic acid copolymer cationic **modified** nanoparticle antisoiling agent fabric; allyl methacrylate copolymer cationic **modified** nanoparticle antisoiling agent fabric

IT Emulsifying agents
(anionic; in dispersions for antisoiling treatment of textiles and nontextiles with cationically modified acrylic polymer nanoparticles)

IT Laundering
Nanoparticles
(antisoiling treatment of textiles and nontextiles with dispersions of cationically modified acrylic polymer nanoparticles)

IT Polyamines
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(cationic modifier; antisoiling treatment of textiles and nontextiles with dispersions of cationically modified acrylic polymer nanoparticles)

IT Surfactants
(cationic, cationic modifier; antisoiling treatment of textiles and nontextiles with dispersions of cationically modified acrylic polymer nanoparticles)

IT Betaines
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(emulsifiers; in dispersions for antisoiling treatment of textiles and nontextiles with cationically modified acrylic polymer nanoparticles)

IT Detergents
(laundry; laundry detergents contg. antisoiling agents based on cationically modified acrylic polymer nanoparticles)

IT Emulsifying agents
(nonionic; in dispersions for antisoiling treatment of textiles and nontextiles with cationically modified acrylic polymer nanoparticles)

IT Colloids
(protective; in dispersions for antisoiling treatment of textiles and nontextiles with cationically modified acrylic polymer nanoparticles)

IT 478296-43-4P, Acrylic acid-allyl methacrylate-ethyl acrylate-methacrylic acid copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(antisoiling treatment of textiles and nontextiles with dispersions of

cationically modified acrylic polymer nanoparticles)

IT 7429-90-5, Aluminum, uses 7439-95-4, Magnesium, uses 7440-39-3, Barium, uses 7440-66-6, Zinc, uses 9002-98-6, Polyethylenimine 10043-52-4, Calcium chloride, uses 26062-79-3, Polydiallyldimethylammonium chloride
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(cationic modifier; antisoiling treatment of textiles and nontextiles with dispersions of cationically modified acrylic polymer nanoparticles)

IT **9005-25-8D, Starch**, oxidized
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(emulsifier; in dispersions for antisoiling treatment of textiles and nontextiles with cationically **modified** acrylic **polymer** nanoparticles)

IT **9005-25-8D, Starch**, oxidized
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(emulsifier; in dispersions for antisoiling treatment of textiles and nontextiles with cationically **modified** acrylic **polymer** nanoparticles)

RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 8 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2002:565012 HCAPLUS
DN 137:97510
TI Starch-based cationic-modified composition of flocculants or binders for ceramic manufacturing
PA Zuckerforschung Tulln Gesellschaft m.b.H., Austria
SO Austrian, 20 pp.
CODEN: AUXXAK
DT Patent
LA German
IC ICM C04B035-632
CC 57-2 (Ceramics)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	AT 408439	B	20011126	AT 2000-1435	20000821
	WO 2002016285	A1	20020228	WO 2001-AT260	20010801
	WO 2002016285	C2	20021128		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

	AU 2001078299	A5	20020304	AU 2001-78299	20010801
	EP 1313682	A1	20030528	EP 2001-956206	20010801

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

US 2003145763 A1 20030807 US 2003-371135 20030221
PRAI AT 2000-1435 A 20000821
WO 2001-AT260 W 20010801

AB The flocculants or binders for ceramic slips contains .gtoreq.95% of amylopectin of potato-**starch** (AP-PS) esp. AP-PS sulfamate that is cationic-**modified** with electropos. gelating quaternary amino-groups. The AP-PS is manufd. from potato using mol. biol., esp. genetic engineering, methods to inhibit the formation of amylose using GBSS genes. The AP-PS is used in the etherified or esterified form, and in the form of graft **polymer**. The AP-PS is linked by epichlorhydrin or 1,3-dichlor-2-propanol mixed with polyamines, or N,N'-dimethylol-N,N'-ethyleneurea mixed with phosphoroxychloride, sodium trimetaphosphate, polyepoxides, adipic acid, glyoxal. The binders based on the AP-PS are suitable for ceramic slips contg. aluminosilicate fibers, alumina, aluminosilicate, and chalk powders, cellulose or polyethylene fibers, and/or colloidal silica. Drying of ceramic formed from such slips is carried out at 300-500.degree. and sintering at 1500-2000.degree..

ST ceramic slip flocculant binder amylopectin potatostarch graft polymer; aluminosilicate fiber alumina chalk silica starch polymer

IT Gene, plant
RL: NUU (Other use, unclassified); USES (Uses)
(GBSS; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)

IT Synthetic fibers
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(aluminum silicate, ceramic component; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)

IT Fibers
RL: MOA (Modifier or additive use); USES (Uses)
(cellulosic, ceramic slip component; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)

IT Chalk
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(ceramic component; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)

IT Polyamines
RL: MOA (Modifier or additive use); USES (Uses)
(component of linking agent; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)

IT Polyolefin fibers
RL: MOA (Modifier or additive use); USES (Uses)
(ethylene, ceramic slip component; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)

IT Quaternary ammonium compounds, uses
RL: MOA (Modifier or additive use); USES (Uses)
(flocculant modifier; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)

IT **Polymers**, processes
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(graft, amylopectin of potatostarch; **starch**-based cationic-**modified** compn. of flocculants or binders for ceramic manufg.)

IT Viscosity

(of etherified amylopectin of potato-starch; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)

IT Epoxides
RL: MOA (Modifier or additive use); USES (Uses)
(polyepoxides, component of linking agent; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)

IT 7773-06-0, Ammonium sulfamate
RL: MOA (Modifier or additive use); USES (Uses)
(cationic modifier; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)

IT 1344-28-1, Alumina, processes
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(ceramic component; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)

IT 7631-86-9, Colloidal silica, uses
RL: MOA (Modifier or additive use); USES (Uses)
(colloidal, ceramic slip component; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)

IT 96-23-1, 1,3-Dichloro-2-propanol 106-89-8, uses 107-22-2, Glyoxal 123-38-6, Propionaldehyde, uses 124-04-9, Adipic acid, uses 136-84-5, N,N'-Dimethylol-N,N'-ethyleneurea 7785-84-4, Sodium trimetaphosphate 10025-87-3, Phosphoric trichloride
RL: MOA (Modifier or additive use); USES (Uses)
(component of linking agent; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)

IT **9005-25-8**, Potato starch, uses 9037-22-3, Amylopectin
RL: TEM (Technical or engineered material use); USES (Uses)
(flocculant; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)

IT **3033-77-0**, 2,3-Epoxypropyltrimethyl ammonium chloride
RL: MOA (Modifier or additive use); USES (Uses)
(linking agent; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)

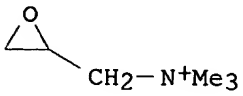
IT **9005-25-8**, Potato starch, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(flocculant; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)

RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT **3033-77-0**, 2,3-Epoxypropyltrimethyl ammonium chloride
RL: MOA (Modifier or additive use); USES (Uses)
(linking agent; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)

RN 3033-77-0 HCAPLUS
CN Oxiranemethanaminium, N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



L41 ANSWER 9 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2002:315059 HCAPLUS
DN 136:327419
TI Detergent tablet
IN Emmerson, Harold; Campbell, Mairi; Brooker, Anju Deepali Massey; Thoen, Christiann Arthur Jacques Kamiel
PA The Procter & Gamble Company, USA
SO PCT Int. Appl., 84 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C11D017-00
ICS C11D003-37
CC 46-5 (Surface Active Agents and **Detergents**)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002033037	A1	20020425	WO 2000-US28797	20001018
W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2001010944	A5	20020429	AU 2001-10944	20001018
WO 2002033038	A2	20020425	WO 2001-US32593	20011018
WO 2002033038	A3	20030130		
W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRAI WO 2000-US28797 A 20001018

AB A detergent tablet, for use in a washing machine, has .gtoreq.1 phases .gtoreq.1 of which is as a compressed particulate solid comprising a crosslinked polymeric disintegrant and a disintegration retardant, optionally non-crosslinked disintegrants. An example detergent tablet

contains a first phase contg. STPP 9.6, silicate 0.67, carbonate 2.74, HEDP 0.18, sodium perborate monohydrate 2.45, catalyst 0.002, triacetate 0.6, Sokalan HP 62G disintegrant 0.7, enzymes 0.17, nonionic 1.2, tetradecyl amine oxide disintegration retardant 0.24, polyethylene glycol 0.26, BTA 0.01, paraffin 0.1, and perfume 0.02, while a second phase may contain further surfactant actives. The detergent tablets display improved and/or controlled dissoln., strength and long-term storage characteristics.

ST crosslinked polyvinylpyrrolidone amine oxide disintegration retardant detergent

IT Detergents
(dishwashing; detergent tablet contg. crosslinked disintegrant and disintegration retardant)

IT Surfactants
(disintegration retardant; detergent tablet contg. crosslinked disintegrant and disintegration retardant)

IT Amine oxides
RL: TEM (Technical or engineered material use); USES (Uses)
(disintegration retardant; detergent tablet contg. crosslinked disintegrant and disintegration retardant)

IT Detergents
(laundry; detergent tablet contg. crosslinked disintegrant and disintegration retardant)

IT 9004-34-6, Cellulose, uses **9005-25-8, Starch**, uses
RL: **POF (Polymer in formulation)**; TEM (Technical or engineered material use); USES (Uses)
(crosslinked; detergent tablet contg. crosslinked disintegrant and disintegration retardant)

IT 415725-48-3, Sokalan HP 62G
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(detergent tablet contg. crosslinked disintegrant and disintegration retardant)

IT 3332-27-2, Dimethyltetradecylamine oxide
RL: TEM (Technical or engineered material use); USES (Uses)
(detergent tablet contg. crosslinked disintegrant and disintegration retardant)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Basf Ag; WO 0047704 A 2000 HCAPLUS
(2) Basf Ag; EP 1036839 A 2000 HCAPLUS
(3) Procter & Gamble; WO 9811187 A 1998 HCAPLUS
(4) Procter & Gamble; WO 0043488 A 2000 HCAPLUS
(5) Rohm & Haas; EP 0972825 A 2000 HCAPLUS
(6) Stockhausen Chem Fab Gmbh; EP 1004656 A 2000 HCAPLUS

IT **9005-25-8, Starch**, uses
RL: **POF (Polymer in formulation)**; TEM (Technical or engineered material use); USES (Uses)
(crosslinked; detergent tablet contg. crosslinked disintegrant and disintegration retardant)

RN 9005-25-8 HCAPLUS

CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 10 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2001:904429 HCAPLUS

DN 136:39174

TI Use of cationically modified, particulate, hydrophobic polymers as additives for rinsing, cleaning and impregnating agents for hard surfaces
IN Boeckh, Dieter; Noerenberg, Ralf; Hildebrandt, Soeren; Mohr, Bernhard; Schoepke, Holger; Leyrer, Reinhold J.; Huff, Juergen
PA BASF Aktiengesellschaft, Germany
SO PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DT Patent
LA German
IC ICM C11D003-37
ICS C11D017-00; C11D017-06; C11D001-02; C11D001-38; C11D001-66; C11D003-04; C11D003-20
CC 46-6 (Surface Active Agents and **Detergents**)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001094517	A1	20011213	WO 2001-EP6341	20010605
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
DE 10027638	A1	20011213	DE 2000-10027638	20000606
EP 1287103	A1	20030305	EP 2001-943474	20010605
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

PRAI DE 2000-10027638 A 20000606
WO 2001-EP6341 W 20010605
OS MARPAT 136:39174
AB The invention relates to the use of cationically modified, particulate, hydrophobic polymers whose surface is cationically modified by coverage with cationic polymers and whose particle size is between 10 nm and 100 um, as additives for rinsing, cleaning and impregnating agents for hard surfaces such as in dishwashing. An example was given based on acrylic acid-Et acrylate-methacrylic acid copolymer modified with epichlorohydrin-imidazole copolymer as the cationic modifier.
ST rinsing cleaning aid acrylic polymer particle cationic modification
IT Fluoropolymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(anionic; cationically modified, particulate hydrophobic fluoropolymers as additives for hard surface cleaners)
IT Emulsifying agents
Surfactants
(anionic; in cationically modified, particulate hydrophobic polymers as additives for hard surface cleaners)
IT Polyelectrolytes
(cationic; in cationically modified, particulate hydrophobic polymers as additives for hard surface cleaners)
IT Detergents
(dishwashing; cationically modified, particulate hydrophobic polymers as additives for hard surface cleaners)
IT Quaternary ammonium compounds, uses
RL: MOA (Modifier or additive use); USES (Uses)
(ester group-contg.; in cationically modified, particulate hydrophobic

polymers as additives for hard surface cleaners)
IT Surfactants
(nonionic; in cationically modified, particulate hydrophobic polymers as additives for hard surface cleaners)
IT Colloids
(protective; in cationically modified, particulate hydrophobic polymers as additives for hard surface cleaners)
IT Detergents
(rinse aids; cationically modified, particulate hydrophobic polymers as additives for hard surface cleaners)
IT 62-54-4, Calcium acetate 7429-90-5D, Aluminum, salts 7439-95-4D, Magnesium, salts 7440-66-6D, Zinc, salts 9002-98-6, Ethylenimine homopolymer 9003-39-8, Polyvinylpyrrolidone 10043-52-4, Calcium chloride, uses 68797-57-9, Epichlorohydrin-imidazole copolymer
RL: MOA (Modifier or additive use); USES (Uses)
(cationic modifier; in cationically modified, particulate hydrophobic polymers as additives for hard surface cleaners)
IT 25212-88-8, Ethyl acrylate-methacrylic acid copolymer 26300-51-6, Methyl methacrylate-Acrylic acid-butyl acrylate copolymer 30351-73-6, Methacrylic acid-Acrylic acid-ethyl acrylate copolymer 380220-23-5, Acrylamide-acrylic acid-ethyl acrylate-methacrylic acid copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(cationically modified, particulate hydrophobic acrylic polymers as additives for hard surface cleaners)
IT 380240-31-3, Nuva FTA 4
RL: TEM (Technical or engineered material use); USES (Uses)
(cationically modified, particulate hydrophobic fluoropolymers as additives for hard surface cleaners)
IT **9005-25-8, Starch**, uses
RL: MOA (Modifier or additive use); USES (Uses)
(protective colloids; in cationically **modified**, particulate hydrophobic **polymers** as additives for hard surface cleaners)
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Anon; PATENT ABSTRACTS OF JAPAN 1999, V1999(13)
(2) Kao Corp; EP 0372427 A 1990 HCAPLUS
(3) Kao Corp; JP 11209793 A 1999 HCAPLUS
(4) Reckitt & Colmann; WO 0017303 A 2000 HCAPLUS
IT **9005-25-8, Starch**, uses
RL: MOA (Modifier or additive use); USES (Uses)
(protective colloids; in cationically **modified**, particulate hydrophobic **polymers** as additives for hard surface cleaners)
RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 11 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:904427 HCAPLUS
DN 136:39143
TI Laundry compns. and use of particle-shaped, cationically modified hydrophobic polymers therefor
IN Boeckh, Dieter; Noerenberg, Ralf; Hildebrandt, Soeren; Mohr, Bernhard; Schoepke, Holger; Leyrer, Reinhold J.; Huff, Juergen
PA BASF Aktiengesellschaft, Germany
SO PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DT Patent

LA German
IC ICM C11D003-37
CC 46-5 (Surface Active Agents and **Detergents**)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001094516	A1	20011213	WO 2001-EP6312	20010602
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	DE 10027634	A1	20011213	DE 2000-10027634	20000606
	EP 1287104	A1	20030305	EP 2001-947335	20010602
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRAI	DE 2000-10027634	A	20000606		
	WO 2001-EP6312	W	20010602		

OS MARPAT 136:39143
AB The invention relates to the use of cationically modified, particle-shaped, hydrophobic polymers as additives in laundry formulations. The surface of the polymers is cationically modified by means of a coating of cationic polymers and the polymer particle size ranges from 10 nm to 100 .mu.m. An example for application to cotton was given which used acrylic acid-Et acrylate-methacrylic acid copolymer along with polyethylenimine as the cationic polymer.
ST laundering aid acrylic polymer particle cationic polyethylenimine modification
IT Emulsifying agents
(anionic; in particle-shaped, cationically modified hydrophobic polymers for laundering aids)
IT Fluoropolymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(anionic; particle-shaped, cationically modified hydrophobic fluoropolymers for laundering aids)
IT Polyelectrolytes
Surfactants
(cationic; in particle-shaped, cationically modified hydrophobic polymers for laundering aids)
IT Detergents
(laundry; particle-shaped, cationically modified hydrophobic polymers for laundering aids for)
IT Colloids
(protective; in particle-shaped, cationically modified hydrophobic acrylic polymers for laundering aids)
IT 9002-98-6, Ethylenimine homopolymer 29297-55-0, Vinylimidazole-vinylpyrrolidone copolymer 68797-57-9, Epichlorohydrin-imidazole copolymer
RL: MOA (Modifier or additive use); USES (Uses)
(cationic modifier; in particle-shaped, cationically modified hydrophobic polymers for laundering aids)
IT 25212-88-8, Ethyl acrylate-methacrylic acid copolymer 26300-51-6, Acrylic acid-butyl acrylate-methyl methacrylate copolymer 30351-73-6, Acrylic acid-ethyl acrylate-methacrylic acid copolymer 380220-23-5,

Acrylamide-acrylic acid-ethyl acrylate-methacrylic acid copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(particle-shaped, cationically modified hydrophobic acrylic polymers for laundering aids)
IT 380240-31-3, Nuva FTA 4
RL: TEM (Technical or engineered material use); USES (Uses)
(particle-shaped, cationically modified hydrophobic fluoropolymers for laundering aids)
IT **9005-25-8, Starch**, uses
RL: MOA (Modifier or additive use); USES (Uses)
(protective colloid; in particle-shaped, cationically **modified** hydrophobic acrylic **polymers** for laundering aids)
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Gordon, N; WO 0056848 A 2000 HCAPLUS
(2) Henkel Kgaa; DE 4323638 A 1995 HCAPLUS
(3) Kao Corp; EP 0372427 A 1990 HCAPLUS
(4) Matsuda, K; US 4746455 A 1988 HCAPLUS
(5) Parran, J; US 3580853 A 1971
IT **9005-25-8, Starch**, uses
RL: MOA (Modifier or additive use); USES (Uses)
(protective colloid; in particle-shaped, cationically **modified** hydrophobic acrylic **polymers** for laundering aids)
RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 12 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:904425 HCAPLUS
DN 136:39142
TI Laundry rinsing, care, detergent and cleaning products and use of cationically modified, particle-shaped, hydrophobic polymers in
IN Boeckh, Dieter; Noerenberg, Ralf; Detering, Juergen; Bertleff, Werner; Schoepke, Holger; Leyrer, Reinhold J.; Huff, Juergen
PA Basf Aktiengesellschaft, Germany
SO PCT Int. Appl., 44 pp.
CODEN: PIXXD2
DT Patent
LA German
IC ICM C11D003-37
ICS C11D017-00; C11D017-06; C11D001-02; C11D001-38; C11D001-66; C11D003-04
CC 46-5 (Surface Active Agents and **Detergents**)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001094515	A1	20011213	WO 2001-EP6311	20010602
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
DE 10027636	A1	20011213	DE 2000-10027636	20000606

EP 1287102 A1 20030305 EP 2001-938247 20010602
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
PRAI DE 2000-10027636 A 20000606
WO 2001-EP6311 W 20010602
OS MARPAT 136:39142
AB The invention relates to the use of cationically modified, particle-shaped, hydrophobic polymers as additives in laundry or other cleaning formulations. The surface of the polymers is cationically modified by a coating of polyvalent metallic ions and/or cationic surfactants, and the particle size of the polymers ranges from 10 nm to 100 .mu.m. Examples for cotton laundering were given which used acrylic acid-Et acrylate-methacrylic acid copolymer and salts of Ca, Zn, or Al.
ST laundering aid acrylic polymer particle cationic modification
IT Emulsifying agents
(anionic; in cationically modified, particulate, hydrophobic polymer compns. for laundering)
IT Polyelectrolytes
(anionic; in cationically modified, particulate, hydrophobic polymer compns. for laundering aids)
IT Fluoropolymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(anionic; in cationically modified, particulate, hydrophobic polymer compns. for laundering aids)
IT Surfactants
(cationic; in cationically modified, particulate, hydrophobic polymer compns. for laundering aids)
IT Quaternary ammonium compounds, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(ester group-contg., cationic surfactant; in cationically modified, particulate, hydrophobic polymer compns. for laundering aids)
IT Detergent builders
(in cationically modified, particulate, hydrophobic polymer compns. for laundering)
IT Salts, uses
RL: MOA (Modifier or additive use); USES (Uses)
(in cationically modified, particulate, hydrophobic polymer compns. for laundering)
IT Detergents
(laundry; cationically modified, particulate, hydrophobic polymer compns. for)
IT Colloids
(protective; in cationically modified, particulate, hydrophobic polymer compns. for laundering)
IT 30351-73-6, Acrylic acid-ethyl acrylate-methacrylic acid copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(cationically modified, particulate, hydrophobic acrylic polymer compns. for laundering aids)
IT 380240-31-3, Nuva FTA 4
RL: TEM (Technical or engineered material use); USES (Uses)
(cationically modified, particulate, hydrophobic fluoropolymer compns. for laundering aids)
IT 62-54-4, Calcium acetate 7429-90-5D, Aluminum, salts 7439-95-4D, Magnesium, salts 7440-66-6D, Zinc, salts 10043-52-4, Calcium chloride, uses
RL: MOA (Modifier or additive use); USES (Uses)
(in cationically modified, particulate, hydrophobic polymer compns. for laundering aids)

IT **9005-25-8, Starch,** uses
RL: NUU (Other use, unclassified); USES (Uses)
(protective colloid; in cationically **modified,** particulate, hydrophobic acrylic **polymer** compns. for laundering aids)
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Kao Corp; EP 0372427 A 1990 HCAPLUS
(2) Matsuda, K; US 4746455 A 1988 HCAPLUS
(3) Procter & Gamble; WO 9919440 A 1999 HCAPLUS
(4) Procter & Gamble; WO 9927065 A 1999 HCAPLUS
(5) Stockhausen Chem Fab Gmbh; WO 8903669 A 1989 HCAPLUS
IT **9005-25-8, Starch,** uses
RL: NUU (Other use, unclassified); USES (Uses)
(protective colloid; in cationically **modified,** particulate, hydrophobic acrylic **polymer** compns. for laundering aids)
RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 13 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:798380 HCAPLUS
DN 135:346179
TI **Modified starch**-based **polymer**-containing **fabric** care compositions and methods employing same
IN Moe, Jennifer Leupin; Spendel, Wolfgang Ulrich
PA Procter + Gamble Company, USA
SO PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C11D003-22
CC 46-5 (Surface Active Agents and **Detergents**)
Section cross-reference(s): 44

applicants

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001081524	A1	20011101	WO 2001-US12759	20010419
W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2002045562	A1	20020418	US 2001-838512	20010419
EP 1274824	A1	20030115	EP 2001-928661	20010419
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

PRAI US 2000-198710P P 20000420
WO 2001-US12759 W 20010419
AB The patent relates to compns. and methods which utilize certain **modified starch**-based **polymer** and/or oligomer materials, particularly **modified amylose** and/or **modified amylopectin** materials, as **fabric**

treatment agents that can impart **fabric** appearance and integrity benefits to **fabrics** and textiles laundered in washing solns. which contain such materials. The **modified starch** -based **polymer** and/or oligomer materials can be added to wash solns. by incorporating them into a laundry and/or **fabric** care compn., a **fabric** softener or by adding them sep. to the washing soln. The **modified starch**-based **polymer** and/or oligomer materials are described herein primarily as liq. or granular detergent additives but the present invention is not meant to be so limited. Thus, chlorocarboxylation product of **starch** /chlorohexane/monochloroacetic acid was prepd. and used as an additive with surfactants to make a laundry compn.

ST **starch** chloro compd substitution reaction product laundry detergent compn; carboxymethylation **starch** monochloroacetic acid detergent additive

IT Carboxymethylation
Surfactants
(in prepn. of **modified starch**-based **polymer** -contg. **fabric** care compns.)

IT Detergents
(laundry; prepn. of **modified starch**-based **polymer**-contg. **fabric** care compns.)

IT **79-11-8DP**, Monochloroacetic acid, reaction product with **starch 544-10-5DP**, Hexyl chloride, reaction product with **starch 3033-77-0DP**, 2,3-Epoxypropyltrimethyl ammonium chloride, reaction product with **starch 4860-03-1DP**, Cetyl chloride, reaction product with **starch 10126-68-8DP**, Cetyl ketene dimer, reaction product with **starch 28519-06-4DP**, Chlorodecane, reaction product with **starch 34214-79-4DP**, Chlorohexadecane, reaction product with **starch**
RL: **IMF (Industrial manufacture)**; **POF (Polymer in formulation)**; TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(in prepn. of **modified starch**-based **polymer** -contg. **fabric** care compns.)

IT **9005-82-7**, **Amylose 9037-22-3**, **Amylopectin**
RL: **RCT (Reactant)**; **RACT (Reactant or reagent)**
(in prepn. of **modified starch**-based **polymer** -contg. **fabric** care compns.)

IT **9005-25-8DP**, **Starch**, reaction product with chloroalkanes and/or monochloroacetic acid, uses
RL: **IMF (Industrial manufacture)**; **POF (Polymer in formulation)**; TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(prepn. of **modified starch**-based **polymer** -contg. **fabric** care compns.)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD

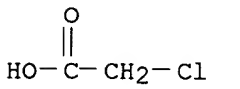
RE

(1) Akzo Nobel Nv; WO 9424169 A 1994 HCAPLUS
(2) Basf Ag; EP 0526800 A 1993 HCAPLUS
(3) Diehl; US 4011169 A 1977 HCAPLUS
(4) Fidia Spa; EP 0615979 A 1994 HCAPLUS
(5) Procter & Gamble; WO 9914245 A 1999 HCAPLUS
(6) Procter & Gamble; WO 9914295 A 1999 HCAPLUS
(7) Rudkin; US 4179382 A 1979 HCAPLUS

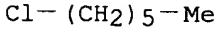
IT **79-11-8DP**, Monochloroacetic acid, reaction product with

starch 544-10-5DP, Hexyl chloride, reaction product with **starch 3033-77-0DP**, 2,3-Epoxypropyltrimethyl ammonium chloride, reaction product with **starch 4860-03-1DP**, Cetyl chloride, reaction product with **starch 10126-68-8DP**, Cetyl ketene dimer, reaction product with **starch 28519-06-4DP**, Chlorodecane, reaction product with **starch 34214-79-4DP**, Chlorohexadecane, reaction product with **starch**
RL: **IMF (Industrial manufacture)**; **POF (Polymer in formulation)**; TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(in prepn. of **modified starch**-based **polymer** -contg. **fabric** care compns.)

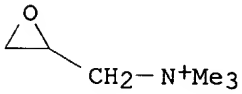
RN 79-11-8 HCAPLUS
CN Acetic acid, chloro- (8CI, 9CI) (CA INDEX NAME)



RN 544-10-5 HCAPLUS
CN Hexane, 1-chloro- (6CI, 8CI, 9CI) (CA INDEX NAME)

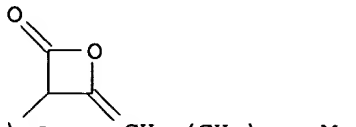


RN 3033-77-0 HCAPLUS
CN Oxiranemethanaminium, N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



RN 4860-03-1 HCAPLUS
CN Hexadecane, 1-chloro- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

RN 10126-68-8 HCAPLUS
CN 2-Oxetanone, 4-heptadecylidene-3-hexadecyl- (8CI, 9CI) (CA INDEX NAME)



Me—(CH2)15 CH—(CH2)15—Me

RN 28519-06-4 HCAPLUS
CN Decane, chloro- (6CI, 8CI, 9CI) (CA INDEX NAME)

Me—(CH2)8—Me

D1—Cl

RN 34214-79-4 HCAPLUS
CN Hexadecane, chloro- (8CI, 9CI) (CA INDEX NAME)

Me—(CH2)14—Me

D1—Cl

IT **9005-82-7, Amylose 9037-22-3, Amylopectin**
RL: **RCT (Reactant); RACT (Reactant or reagent)**
(in prepn. of **modified starch**-based **polymer** -contg. **fabric** care compns.)
RN 9005-82-7 HCAPLUS
CN Amylose (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 9037-22-3 HCAPLUS
CN Amylopectin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **9005-25-8DP, Starch,** reaction product with chloroalkanes and/or monochloroacetic acid, uses
RL: **IMF (Industrial manufacture); POF (Polymer in formulation);** TEM (Technical or engineered material use); **PREP (Preparation);** USES (Uses)
(prepn. of **modified starch**-based **polymer** -contg. **fabric** care compns.)
RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 14 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:571756 HCAPLUS
DN 136:185622

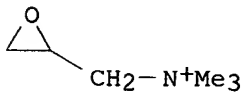
TI Starch adhesive and oxidation degree
AU Wang, Feidi; Qiu, Qinghua
CS Guangdong University of Technology, Canton, 510090, Peop. Rep. China
SO Guangzhou Huagong (2001), 29(2), 22-24
CODEN: GUHUEZ; ISSN: 1001-9677
PB Guangzhou Huagong Bianjibu
DT Journal
LA Chinese
CC 44-6 (Industrial Carbohydrates)
AB The starch adhesive was prepd. from cassava starch by mixing with water, oxidizing with KMnO4 in the presence of moderator, finally mixing with NaOH, borax, CaCO3, etc. The effects of added amt. and concn. of oxidizing agent and oxidn. time on the quality of the adhesive were studied. The optimum amt. of oxidizing agent was 3%, its concn. was 4%, and the oxidn. time was 20 min.
ST starch adhesive oxidn property
IT Adhesion, physical
Stability
Viscosity
(of starch adhesive after oxidn.)
IT Adhesives
Oxidation
Oxidizing agents
(starch adhesive oxidn.)
IT Gelation
(time; of starch adhesive after oxidn.)
IT 9005-25-8DP, **Starch**, oxidized
RL: **POF (Polymer in formulation)**; PRP (Properties); **SPN (Synthetic preparation)**; **PREP (Preparation)**; USES (Uses)
(cassava; **starch** adhesive)
IT **9005-25-8**, Starch, reactions
RL: **RCT (Reactant)**; **RACT (Reactant or reagent)**
(cassava; starch adhesive oxidn)
IT 471-34-1, Calcium carbonate, uses 1303-96-4, Borax 1310-73-2, Sodium hydroxide, uses
RL: MOA (Modifier or additive use); USES (Uses)
(starch adhesive contg.)
IT 7722-64-7, Potassium permanganate
RL: RCT (Reactant); RACT (Reactant or reagent)
(starch adhesive oxidn. by)
IT **9005-25-8**, Starch, reactions
RL: **RCT (Reactant)**; **RACT (Reactant or reagent)**
(cassava; starch adhesive oxidn)
RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 15 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:346273 HCAPLUS
DN 134:368462
TI Cationic cereal flours from low input growing as additives in paper manufacture
AU Kratzsch, G.; Handreck, B.; Gottstein, D.; Schirner, R.; Fiehn, G.
CS Hellriegel Institut, Germany
SO PTS-Manuskript (2000), 2058, Einsatz von Staerke bei der Papiererzeugung, 6E, 6/1-6/15
CODEN: PTSMFN; ISSN: 0942-749X

DT Report
LA German
CC 43-7 (Cellulose, Lignin, Paper, and Other Wood Products)
Section cross-reference(s): 11
AB Results on 3-yr investigations regarding prodn. of cereals under low input conditions (i.e., lower level of fertilization and plant protection), their **modification**, and use in paper industry are presented. Five to six varieties of rye, triticale, and barley were examd. with respect to cultivation, milling, chem. cationization (by reaction with 2,3-epoxypropyl-trimethylammonium chloride), and application in paper manuf. The crops were characterized by yield and quality (e.g., protein, **starch**, and pentosane). Low input cultivation induced good structure of grain (high **starch** and low protein content) and pos. effects on milling properties and on distribution of the ingredients of flour. Cationically **modified** cereals showed higher charge d., better viscoelastic properties in aq. suspensions and stability in colloidal dispersions with synthetic cobinders than flours from intensive cultivation. **Modified** rye flours were characterized by specific viscosity and **polymeric** charges useful for industrial application. A scaling-up of **modification** of renewable raw material from low input cultivation for conditions of industry confirmed the results from lab. Various test series of internally applied **modified** cereals in paper manufg. revealed a strength-enhancing effect of these products. The papers were assessed by their plybond strength, burst, and SCD.
ST cereal flour extensive cultivation compn rheol paper strength; rye flour extensive cultivation cationization paper additive; triticale flour extensive cultivation cationization paper additive; barley flour extensive cultivation cationization paper additive; cationic cereal flour extensive cultivation paper
IT Flours and Meals
(barley; properties of cereal flours from low-input cultivation and effects of cationic flours on paper strength)
IT Barley
Rye
Triticale
(flour; properties of cereal flours from low-input cultivation and effects of cationic flours on paper strength)
IT Proteins, general, analysis
RL: ANT (Analyte); ANST (Analytical study)
(plant; properties of cereal flours from low-input cultivation and effects of cationic flours on paper strength)
IT Paper
Strength
(properties of cereal flours from low-input cultivation and effects of cationic flours on paper strength)
IT Flours and Meals
(rye; properties of cereal flours from low-input cultivation and effects of cationic flours on paper strength)
IT **3033-77-0**, (2,3-Epoxypropyl)trimethylammonium chloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(modifier; properties of cereal flours from low-input cultivation and effects of cationic flours on paper strength)
IT **9005-25-8**, Starch, analysis
RL: ANT (Analyte); ANST (Analytical study)
(properties of cereal flours from low-input cultivation and effects of cationic flours on paper strength)
IT **3033-77-0**, (2,3-Epoxypropyl)trimethylammonium chloride

RL: RCT (Reactant); RACT (Reactant or reagent)
(modifier; properties of cereal flours from low-input cultivation and effects of cationic flours on paper strength)
RN 3033-77-0 HCAPLUS
CN Oxiranemethanaminium, N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl^-

IT **9005-25-8**, Starch, analysis
RL: ANT (Analyte); ANST (Analytical study)
(properties of cereal flours from low-input cultivation and effects of cationic flours on paper strength)
RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 16 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:270532 HCAPLUS
DN 134:296914
TI Function component-encapsulated core-shell polymer composites
IN Meiwa, Zenpei; Hasebe, Yoshihiro; Tokunaga, Shinichi
PA Kao Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08L101-16
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 44, **46**, 62
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001106925	A2	20010417	JP 1999-290727	19991013
PRAI	JP 1999-290727		19991013		

AB The composite releasing functional component such as perfume, cold sense agents, fungicide, etc., comprises a functional component, a hydrophobic polymer particle, and a water-sol. polymer, wherein the hydrophobic polymer particle encapsulates the functional component and at least one part of hydrophobic polymer particles exists in the water sol. polymer. Thus, 2.5 parts DL-limonene (perfume)-encapsulated stearyl methacrylate-chitosan (SK 10)-methacrylic acid core-shell copolymer was mixed with T 330 (maleic acid-modified polyvinyl alc.) 100 , glycerol 15, and W 400G (cellulose powder) 2.0, coated on a PET film, and dried to give a 70 .mu.m-thick film showing good fragrance strength after 30 days.
ST function component encapsulated hydrophobic polymer; chitosan methacrylate graft copolymer limonene PVA sheet
IT Silsesquioxanes
RL: POF (Polymer in formulation); TEM (Technical or engineered material

use); USES (Uses)
(Me; function component-encapsulated core-shell polymer composites)
IT Fungicides
Odor and Odorous substances
Perfumes
(function component-encapsulated core-shell polymer composites)
IT Carnauba wax
Cottonseed oil
Waxes
RL: MOA (Modifier or additive use); USES (Uses)
(function component-encapsulated core-shell polymer composites)
IT Polysiloxanes, uses
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(function component-encapsulated core-shell polymer composites)
IT 252206-04-5P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(function component-encapsulated core-shell polymer composites)
IT 138-86-3, DL-Limonene 470-82-6, 1,8-Cineole 2216-51-5 179241-62-4, Sanisol P
RL: MOA (Modifier or additive use); USES (Uses)
(function component-encapsulated core-shell polymer composites)
IT 9003-20-7D, Poly(vinyl acetate), hydrolyzed 9003-39-8, K 60 9004-32-4, FT 3 9004-53-9, Pinedex 100 **9005-25-8D, Starch, modified,** uses 34229-80-6, Maleic acid-vinyl alcohol copolymer 52410-51-2, T 330 104922-10-3, Gohsenol GL 05 115252-32-9, Solfarex A 55
RL: **POF (Polymer in formulation)**; TEM (Technical or engineered material use); USES (Uses)
(function component-encapsulated core-shell **polymer** composites)
IT **9005-25-8D, Starch, modified,** uses
RL: **POF (Polymer in formulation)**; TEM (Technical or engineered material use); USES (Uses)
(function component-encapsulated core-shell **polymer** composites)
RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 17 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:64116 HCAPLUS
DN 134:133315
TI Encapsulated oil particles, their manufacture and granular detergent containing the same
IN Dihora, Jiten Odhavji; Chapman, Benjamin Edgar
PA Procter and Gamble Company, USA
SO PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C11D003-50
ICS C11D017-00; C11D003-12; A61K007-46; A23L001-22
CC 46-5 (Surface Active Agents and **Detergents**)
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE

PI	WO 2001005926	A1	20010125	WO 2000-US19471	20000714
	W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	BR 2000012673	A	20020409	BR 2000-12673	20000714
	EP 1196533	A1	20020417	EP 2000-948719	20000714
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2003505537	T2	20030212	JP 2001-511142	20000714
	US 6608017	B1	20030819	US 2001-980801	20011203
PRAI	US 1999-144635P	P	19990720		
	WO 2000-US19471	W	20000714		

AB The encapsulated oil particles, esp. useful in laundry detergent compns., comprises a water-sol. **polymer** (such as **modified starch**), an oil (such as perfume, flavor) and a hydrophobically **modified** silica, wherein the hydrophobic additive is directly added to the oil prior to emulsification with the water-sol. **polymer**.

ST starch encapsulated oil particle granular detergent; perfume oil starch encapsulated silica particle

IT Detergents
(granular; manuf. of starch-encapsulated oil particles for granular detergents)

IT Encapsulation
Perfumes
(manuf. of starch-encapsulated oil particles for granular detergents)

IT 7631-86-9, Fumed silica, uses
RL: MOA (Modifier or additive use); USES (Uses)
(colloidal; manuf. of starch-encapsulated oil particles for granular detergents)

IT 139351-18-1, Aerosil R 974 154303-25-0, Sipernat D 11
RL: MOA (Modifier or additive use); USES (Uses)
(manuf. of starch-encapsulated oil particles for granular detergents)

IT **9005-25-8D, Starch**, modified, uses 26680-54-6D, Octenyl succinic anhydride, **starch** modified with 321864-30-6, Narlex PPE 1388
RL: **POF (Polymer in formulation)**; TEM (Technical or engineered material use); USES (Uses)
(manuf. of **starch**-encapsulated oil particles for granular detergents)

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Behan, J; US 5500223 A 1996
(2) Behan, J; US 5840668 A 1998 HCAPLUS
(3) Garner-Gray, P; US 5336665 A 1994
(4) Lion Corp; JP 61155307 A 1986 HCAPLUS
(5) Nestle Sa; EP 0852912 A 1998 HCAPLUS
(6) Procter & Gamble; EP 0523287 A 1993 HCAPLUS
(7) Procter & Gamble; EP 0684301 A 1995 HCAPLUS
(8) Procter & Gamble; EP 0965326 A 1999 HCAPLUS

IT **9005-25-8D, Starch**, modified, uses
RL: **POF (Polymer in formulation)**; TEM (Technical or engineered material use); USES (Uses)
(manuf. of **starch**-encapsulated oil particles for granular detergents)
RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 18 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:675263 HCAPLUS
DN 134:164744
TI Preparation of the corn starch adhesive modified with polyvinyl formal resin
AU Gong, Da-chun; Luo, Hua-jun; Tu, Zhi-ying
CS Research Institute of Chemical Engineering, Sanxia University, Yichang, 443001, Peop. Rep. China
SO Huaxue Yu Nianhe (2000), (3), 122-123, 126
CODEN: HYZHEN; ISSN: 1001-0017
PB Huaxue Yu Nianhe Bianji Weiyuanhui
DT Journal
LA Chinese
CC 44-8 (Industrial Carbohydrates)
AB The corn starch was etherified with chloroacetic acid and then oxidated with H2O2 to give modified starch. The modified starch was mixed with polyvinyl formal prepd. Effects of etherification, oxidization, H2O2 amt., NaOH amt., and amt. of polyvinyl fomal on the adhesive properties of the compd. adhesive were discussed.
ST corn starch etherification oxidn polyvinyl formal adhesive
IT Adhesives
Adsorption
(effects on adhesion of etherified, oxidated starch adhesive mixts with polyvinyl formal)
IT Polyvinyl acetals
RL: **POF (Polymer in formulation)**; PRP (Properties); **SPN (Synthetic preparation)**; TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(formals; prepn., water adsorption, and viscosity of etherified, oxidated **starch** adhesive mixts with polyvinyl formal)
IT Etherification
Oxidation
(prepn., water adsorption, and viscosity of etherified, oxidated starch adhesive mixts with polyvinyl formal)
IT 1310-73-2, Sodium hydroxide, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(effects on adhesion of etherified, oxidated starch adhesive mixts with polyvinyl formal)
IT 7722-84-1, Hydrogen peroxide, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(oxidant; prepn., water adsorption, and viscosity of etherified, oxidated starch adhesive mixts with polyvinyl formal)
IT 9057-06-1P, Carboxymethyl **starch**
RL: **POF (Polymer in formulation)**; PRP (Properties); **SPN (Synthetic preparation)**; TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(prepn., water adsorption, and viscosity of etherified, oxidated **starch** adhesive mixts with polyvinyl formal)

IT 79-11-8, Chloroacetic acid, reactions **9005-25-8**, Starch, reactions
RL: **RCT (Reactant); RACT (Reactant or reagent)**
(prepn., water adsorption, and viscosity of etherified, oxidated starch adhesive mixts with polyvinyl formal)
IT **9005-25-8**, Starch, reactions
RL: **RCT (Reactant); RACT (Reactant or reagent)**
(prepn., water adsorption, and viscosity of etherified, oxidated starch adhesive mixts with polyvinyl formal)
RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 19 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:573561 HCAPLUS
DN 133:179028
TI Water-soluble polymer coating compositions for rendering solid surfaces glossy and soiling-resistant
IN Holzner, Gunter Wolfgang; Karg, Ernst Jorn
PA Tufty G.m.b.H., Germany
SO Eur. Pat. Appl., 7 pp.
CODEN: EPXXDW
DT Patent
LA German
IC ICM C09G001-00
CC 42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): **46**
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1028150	A2	20000816	EP 1999-106921	19990408
	EP 1028150	A3	20011004		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRAI	CH 1999-257	A	19990210		

AB The title compns., useful for surface protection of articles made of glass, ceramics, china, glazed porcelain, clay, metal and plastic, comprise H2O-sol. **polymers**, e.g., gelatins, bone glue, (**modified**) **starch** and/or poly(vinyl alc.) (PVA). The coatings can be deposited from aq. cleaning agent solns., e.g., rinse solns. used in dishwashing machines or can be molded and suspended, e.g., inside a dishwashing machine where they slowly dissolve in the rinse solns. For example, a moldable compn. contained PVA 84.0, Irgasan DP-300 0.5, perfume 9.0, glycerol monooleate 5.0, aerosil 1.0 and citric acid 0.5%.
ST water sol polymer glossy soiling resistant coating; machine dishwashing rinse water sol polymer coating soiling resistance; polyvinyl alc dishwashing rinse water sol coating soiling resistance
IT Coating materials
(antisoiling; water-sol. polymer coating compns. for rendering solid surfaces glossy and soiling-resistant)
IT Glues
Glues
(bone glues, coatings; water-sol. polymer coating compns. for rendering solid surfaces glossy and soiling-resistant)
IT Gelatins, uses
RL: TEM (Technical or engineered material use); USES (Uses)

(coatings; water-sol. polymer coating compns. for rendering solid surfaces glossy and soiling-resistant)
IT Coating materials
(glossy, water-thinned; water-sol. polymer coating compns. for rendering solid surfaces glossy and soiling-resistant)
IT Bone
Bone
(glues, coatings; water-sol. polymer coating compns. for rendering solid surfaces glossy and soiling-resistant)
IT China
(sanitary ware; water-sol. polymer coating compns. for rendering solid surfaces glossy and soiling-resistant)
IT Ceramics
China
(water-sol. polymer coating compns. for rendering solid surfaces glossy and soiling-resistant)
IT Glass, miscellaneous
Metals, miscellaneous
Plastics, miscellaneous
RL: MSC (Miscellaneous)
(water-sol. polymer coating compns. for rendering solid surfaces glossy and soiling-resistant)
IT 9002-89-5, Mowiol 8-88 9004-53-9D, Dextrin, derivs. **9005-25-8**, Starch, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(coatings; water-sol. polymer coating compns. for rendering solid surfaces glossy and soiling-resistant)
IT **9005-25-8**, Starch, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(coatings; water-sol. polymer coating compns. for rendering solid surfaces glossy and soiling-resistant)
RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 20 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:54017 HCAPLUS
DN 132:109635
TI Starch-based wet-strength additive composition added before web formation in papermaking
IN Luukkonen, Kari
PA Raisio Chemicals Oy, Finland
SO PCT Int. Appl., 14 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM D21H017-29
ICS D21H017-46; D21H021-20
CC 43-7 (Cellulose, Lignin, Paper, and Other Wood Products)
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000003091	A1	20000120	WO 1999-FI602	19990707

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,

TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

FI	9900228	A	20000111	FI 1999-228	19990205
CA	2336801	AA	20000120	CA 1999-2336801	19990707
AU	9950412	A1	20000201	AU 1999-50412	19990707
AU	746333	B2	20020418		
BR	9912263	A	20010417	BR 1999-12263	19990707
EP	1105571	A1	20010613	EP 1999-934746	19990707
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP	2002520502	T2	20020709	JP 2000-559304	19990707
NO	2001000142	A	20010312	NO 2001-142	20010109
US	2001003760	A1	20010614	US 2001-756758	20010110
PRAI FI	1998-1586	A	19980710		
FI	1999-228	A	19990205		
WO	1999-FI602	W	19990707		

AB The object of the present invention is an additive compn. for papermaking which is added to the pulp prior to web formation in order to increase the wet strength of the web. The compn. comprises **starch** which has been **modified**, preferably by peroxide oxidn., such that a 5% suspension has a Brookfield viscosity of 10-400 mPas at 60.degree., and is soln. cationized using a quaternary nitrogen compd. to a charge of <4 mEkv/g, and compn. contains .gtoreq.1 addnl. component, such as (1) a **starch**-based **polymer** dispersion of monomer-grafted **starch** comprising (based on dry-matter), (a) 5-40% **starch** having a cationic charge of 0.01-1 and intrinsic viscosity >1.0 dL/g, and (b) 60-95% of a monomer mixt. contg. .gtoreq.1 vinyl monomer and having a film formation temp. of 0-70.degree. of a **polymer** formed therefrom, and water, and/or (2) polyamide epichlorohydrin resin. Thus, a compn. comprising equal parts of 2,3-epoxypropyltrimethylammonium chloride-cationized thinned **starch**, **starch** grafted with acrylonitrile, Bu acrylate, and styrene, and polyamide epichlorohydrin resin was added at 1 kg/ton dithionite-bleached 50:50 pressure groundwood-thermomech. pulp prior to web formation, giving wet web strength 72.41 N/m at 27.8% dry matter content.

ST starch oxidized cationic wet strength paper; vinyl grafted starch wet strength paper; epoxy polyamide wet strength additive paper

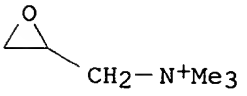
IT Polyamides, uses
Polyamides, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(epoxy; starch-based wet-strength additive compn. added before web formation in papermaking)

IT Epoxy resins, uses
Epoxy resins, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polyamide-; starch-based wet-strength additive compn. added before web formation in papermaking)

IT Cellulose pulp
Newsprint
Paper
(starch-based wet-strength additive compn. added before web formation in papermaking)

IT **3033-77-0D**, 2,3-Epoxypropyltrimethylammonium chloride, reaction products with oxidized starch **9005-25-8D**, Starch, oxidized, reaction products with epoxypropyltrimethylammonium chloride, uses

255385-28-5, Acrylonitrile-butyl acrylate-starch-styrene graft copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(starch-based wet-strength additive compn. added before web formation in papermaking)
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Basf Aktiengesellschaft; EP 0301372 A1 1989 HCAPLUS
(2) Bayer Ag; DE 19728789 A1 1999 HCAPLUS
(3) Eastman Kodak Company; GB 1095123 A 1967
(4) George Weston Foods Limited; WO 9746591 A1 1997 HCAPLUS
(5) Raision Tehtaat Oy; WO 9310305 A1 1993 HCAPLUS
(6) Weyerhaeuser Company; WO 9716595 A1 1997 HCAPLUS
IT **3033-77-0D**, 2,3-Epoxypropyltrimethylammonium chloride, reaction products with oxidized starch **9005-25-8D**, Starch, oxidized, reaction products with epoxypropyltrimethylammonium chloride, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(starch-based wet-strength additive compn. added before web formation in papermaking)
RN 3033-77-0 HCAPLUS
CN Oxiranemethanaminium, N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl^-

RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 21 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1999:282147 HCAPLUS
DN 130:297443
TI Emulsifying composition and emulsions based on water, clay and hydrophilic polymer
IN Namiki, Hideo; Yui, Hiroshi
PA Kabushiki Kaisha Frontier, Japan
SO PCT Int. Appl., 14 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
IC ICM B01J013-00
ICS A61K007-035
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 45, **46**, 62
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9920386	A1	19990429	WO 1998-JP4771	19981021
	W: US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,				

PT, SE
JP 11188253 A2 19990713 JP 1998-9226 19980121
PRAI JP 1997-290037 19971022
JP 1998-9226 19980121

AB Emulsifying compn. comprises water, a clay and a hydrophilic polymer, and the emulsions is obtained by high-speed agitation of the compn. and can be used for prepn. of cosmetics and detergents without using a surfactant. Thus a emulsion was prepd. by mixing of water 300 with squalane oil 0.9, bentonite 0.6, and alginic acid 3 g.

ST emulsion emulsifying compn water clay hydrophilic polymer

IT Castor oil
Corn oil
Olive oil
Rape oil
Soybean oil
Sunflower oil
RL: MOA (Modifier or additive use); USES (Uses)
(compn. contg.; prepn. of emulsifying compn. and emulsions based on water, clay and hydrophilic polymer for cosmetics)

IT Caseins, uses
Collagens, uses
Fibroin
Polyoxyalkylenes, uses
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(compn. contg.; prepn. of emulsifying compn. and emulsions based on water, clay and hydrophilic polymer for cosmetics)

IT Gelatins, uses
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(optional salts; prepn. of emulsifying compn. and emulsions based on water, clay and hydrophilic polymer for cosmetics)

IT Emulsions
(prepn. of emulsifying compn. and emulsions based on water, clay and hydrophilic polymer)

IT Clays, uses
RL: MOA (Modifier or additive use); USES (Uses)
(prepn. of emulsifying compn. and emulsions based on water, clay and hydrophilic polymer)

IT Polymers, uses
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(prepn. of emulsifying compn. and emulsions based on water, clay and hydrophilic polymer)

IT Cosmetics
(prepn. of emulsifying compn. and emulsions based on water, clay and hydrophilic polymer for cosmetics)

IT Detergents
(prepn. of emulsifying compn. and emulsions based on water, clay and hydrophilic polymer for detergents)

IT Fats and Glyceridic oils, uses
RL: MOA (Modifier or additive use); USES (Uses)
(sesame, compn. contg.; prepn. of emulsifying compn. and emulsions based on water, clay and hydrophilic polymer for cosmetics)

IT Fats and Glyceridic oils, uses
RL: MOA (Modifier or additive use); USES (Uses)
(teaseed, compn. contg.; prepn. of emulsifying compn. and emulsions based on water, clay and hydrophilic polymer)

IT 111-01-3, Squalane 9004-61-9, Hyaluronic acid 9005-32-7, Alginic acid
RL: MOA (Modifier or additive use); USES (Uses)
(compn. contg.; prepn. of emulsifying compn. and emulsions based on water, clay and hydrophilic polymer for cosmetics)
IT 9002-89-5, Poly(vinyl alcohol) 9002-98-6 9003-01-4, Poly(acrylic acid) 9003-05-8, Poly(acrylamide) 9003-09-2, Poly(vinyl methyl ether) 9003-39-8 9003-47-8, Polyvinylpyridine 9004-32-4 9004-62-0, Hydroxyethylcellulose **9005-25-8, Starch**, uses 9005-53-2, Lignin, uses 9012-76-4, Chitosan 24991-23-9, Glutamic acid homopolymer, sru 25067-64-5 25104-18-1, Polylysine 25322-68-3 25513-46-6, Glutamic acid homopolymer 26022-14-0, Poly(2-hydroxyethyl acrylate) 27119-07-9, Poly(2-acrylamide-2-methylpropane-sulfonic acid) 27754-99-0, Poly(vinylphosphonic acid) 28327-80-2, Isobutylene-maleic acid copolymer 30946-70-4 38000-06-5, Polylysine
RL: **POF (Polymer in formulation)**; TEM (Technical or engineered material use); USES (Uses)
(compn. contg.; prepn. of emulsifying compn. and emulsions based on water, clay and hydrophilic polymer for cosmetics)
IT 7732-18-5, Water, uses
RL: NUU (Other use, unclassified); USES (Uses)
(prepn. of emulsifying compn. and emulsions based on water, clay and hydrophilic polymer)
IT 9005-38-3, Sodium alginate
RL: MOA (Modifier or additive use); USES (Uses)
(prepn. of emulsifying compn. and emulsions based on water, clay and hydrophilic polymer for cosmetics)
IT 28408-65-3, Poly(N-Vinylacetamide)
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(prepn. of emulsifying compn. and emulsions based on water, clay and hydrophilic polymer for cosmetics)
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Mikimoto Seiyaku K K; JP 884921 A 1996
(2) Shiseido Co Ltd; JP 1045532 A 1998
(3) Tosoh Corp; JP 02169024 A 1990 HCAPLUS
IT **9005-25-8, Starch**, uses
RL: **POF (Polymer in formulation)**; TEM (Technical or engineered material use); USES (Uses)
(compn. contg.; prepn. of emulsifying compn. and emulsions based on water, clay and hydrophilic polymer for cosmetics)
RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 22 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1998:548682 HCAPLUS
DN 129:150310
TI A biogradable starch-based coating to waterproof hydrophilic materials
AU Fringant, C.; Rinaudo, M.; Gontard, N.; Guilbert, S.; Derradji, H.
CS Centre Recherches Macromolecules Vegetales, University Joseph Fourier, Grenoble, F-38041, Fr.
SO Starch/Staerke (1998), 50(7), 292-296
CODEN: STARDD; ISSN: 0038-9056
PB Wiley-VCH Verlag GmbH
DT Journal
LA English

CC 44-6 (Industrial Carbohydrates)
Section cross-reference(s): 43

AB The efficiency of starch acetylation to reduce water sensitivity of hydrophilic materials was investigated. Starch acetate was either included in foamed starch trays and/or used to coat these trays, wheat gluten based films or paper sheets. The water sensitivity of these foamed trays (quantity and kinetics of water uptake) is shown to decrease when starch acetate content of the foam increases. The coating of the hydrophilic trays with starch triacetate is detailed. The biodegradability of the coating was also unambiguously demonstrated. Whatever the nature of the foam, the coating allowed in all cases to slow down the water uptake but best results were obtained in the case of a coated foam prepd. with a starch-starch acetate blend. The coating of wheat gluten films was tested with disappointing results because of chem. incompatibility between wheat gluten and starch acetate. In the case of paper sheet coating, the efficiency in water sensitivity redn. increased with the thickness of the coating film. However, the water sensitivity of this coated paper remained higher than paper coated with polyethylene (with a similar coating thickness).

ST starch acetate biogradable waterproofing coating paper

IT Paper
(acetylation of starch for biogradable waterproofing coatings for)

IT Waterproofing agents
(acetylation of starch for biogradable waterproofing coatings for hydrophilic materials)

IT Polymers, preparation
RL: BPR (Biological process); BSU (Biological study, unclassified); **POF (Polymer in formulation)**; PRP (Properties); **SPN (Synthetic preparation)**; BIOL (Biological study); **PREP (Preparation)**; PROC (Process); USES (Uses)
(biodegradable; acetylation of **starch** for biogradable waterproofing coatings for hydrophilic materials)

IT Polymer degradation
(biol.; acetylation of starch for biogradable waterproofing coatings for hydrophilic materials)

IT Polymer blends
RL: PRP (Properties)
(starch-starch acetate; acetylation of starch for biogradable waterproofing coatings for hydrophilic materials)

IT Coating materials
(water-resistant; acetylation of starch for biogradable waterproofing coatings for hydrophilic materials)

IT 9000-92-4, Amylase
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(activity in biodegrdn. of starch acetate)

IT 9041-63-8P, **Starch** triacetate, preparation
RL: BPR (Biological process); BSU (Biological study, unclassified); **POF (Polymer in formulation)**; PRP (Properties); **SPN (Synthetic preparation)**; BIOL (Biological study); **PREP (Preparation)**; PROC (Process); USES (Uses)
(blends; acetylation of **starch** for biogradable waterproofing coatings for hydrophilic materials)

IT **9005-25-8**, Starch, properties
RL: POF (Polymer in formulation); PRP (Properties); **RCT (Reactant)**; **RACT (Reactant or reagent)**; USES (Uses)
(blends; acetylation of starch for biogradable waterproofing coatings for hydrophilic materials)

IT **9005-25-8**, Starch, properties
RL: POF (Polymer in formulation); PRP (Properties); **RCT (Reactant)**
; **RACT (Reactant or reagent)**; USES (Uses)
(blends; acetylation of starch for biogradable waterproofing coatings for hydrophilic materials)
RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 23 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1998:459837 HCAPLUS
DN 129:177216
TI Finishing agents for laundered garments for retention of **fabric** shape and handle and treatment of **fabrics** with the agents
IN Yoshida, Yasushi; Inogoshi, Junichi; Dejima, Hiroshi; Kubota, Hiroichi; Aoyagi, Muneo
PA Kao Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM D06M015-11
ICS D06M013-463; D06M015-21; D06M015-233; D06M015-263; D06M015-333; D06M015-643
CC 46-5 (Surface Active Agents and **Detergents**)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10183472	A2	19980714	JP 1997-259826	19970925
	JP 3420692	B2	20030630		
PRAI	JP 1996-291761	A	19961101		

OS MARPAT 129:177216
AB The finishing agents (A) contain water-sol. polymers having wt.-av. mol. wt. 1000-6,000,000 and softening agents, and cotton **fabrics** treated with liqs. contg. 0.5% (on fiber) A for 5 min at 20.degree. show B value (stiffness, measured by KES-FB1) 0.05-1.0 g.cm2/cm and greater than B value of the untreated cotton **fabrics** and exhibit 2HG5 value (hysteresis width at shear deformation, measured by KES-FB2-S) 0-10.0 g/cm and smaller than 2HG5 value of the untreated cotton **fabrics**. A T shirt was washed with a detergent in an automatic washing machine, rinsed, centrifuged, treated with a liq. contg. 0.1% (on fiber) finishing agent contg. 8.0% cationic starch and 5.0% Q 2-2036 (water-sol. silicone), and dried to give a shirt with B value 0.16 g.cm2/cm and 2HG5 value 5.8 g/cm and exhibiting shape retention rating (5 best, 1 worst) 5 and handle (+2 very good, -2 very poor) from +2 to +1.
ST **fabric** laundered finishing; clothing laundered finishing; shirt laundered finishing; cationic starch finish laundered garment; silicone softener laundered garment; handle retention laundered garment finishing; shape retention laundered garment finishing
IT Polysiloxanes, uses
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(Q 2-2036, BY 16-052, softening agent; finishing agents contg. water-sol. polymers and softening agents for laundered garments for retention of **fabric** shape and handle)
IT Textiles
(cotton; finishing agents contg. water-sol. polymers and softening

agents for laundered garments for retention of **fabric** shape and handle)

IT Clothing
Fabric softeners
Laundering
Textiles
(finishing agents contg. water-sol. polymers and softening agents for laundered garments for retention of **fabric** shape and handle)

IT Quaternary ammonium compounds, uses
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(finishing agents contg. water-sol. polymers and softening agents for laundered garments for retention of **fabric** shape and handle)

IT Clothing
(shirts; finishing agents contg. water-sol. polymers and softening agents for laundered garments for retention of **fabric** shape and handle)

IT Polymers, uses
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(water-sol.; finishing agents contg. water-sol. polymers and softening agents for laundered garments for retention of **fabric** shape and handle)

IT 9002-89-5, PVA 105 9003-04-7, Poly(acrylic acid) sodium salt 9003-39-8, N-Vinyl-2-pyrrolidone homopolymer **9005-25-8D, Starch**, cationized, uses 9080-79-9, Polystyrenesulfonic acid sodium salt 81859-24-7, UCARE Polymer JR 125 131954-48-8
RL: **POF (Polymer in formulation)**; PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(finishing agents contg. water-sol. polymers and softening agents for laundered garments for retention of **fabric** shape and handle)

IT 143711-48-2, SM8702C
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(softening agent; finishing agents contg. water-sol. polymers and softening agents for laundered garments for retention of **fabric** shape and handle)

IT 107-64-2, Dimethyldistearylammonium chloride 3905-74-6
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(softening agent; finishing agents contg. water-sol. polymers and softening agents for laundered garments for retention of **fabric** shape and handle)

IT **9005-25-8D, Starch**, cationized, uses
RL: **POF (Polymer in formulation)**; PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(finishing agents contg. water-sol. polymers and softening agents for laundered garments for retention of **fabric** shape and handle)

RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 24 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1997:681032 HCAPLUS
DN 127:308014
TI Study on property of modified starch/polyethylene (PE) blend
AU Wang, Yuzhong; Chen, Zefang; Zheng, Changyi

CS Res. Cent. Degradable Flame Retardant Polymer Mater., Sichuan Union Univ., Chengdu, 610064, Peop. Rep. China
SO Suliao Gongye (1996), 24(3), 98-100
CODEN: SUGOF9; ISSN: 1005-5770
PB Suliao Gongye Bianjibu
DT Journal
LA Chinese
CC 37-5 (Plastics Manufacture and Processing)
Section cross-reference(s): 44, **46**
AB The compatibility, thermal property and mech. properties of modified starch/PE blends and PE were studied by using 5 starch modifiers: modifier A (vinyl silane-contg. material), modifier B (amylase), modifier C (multi-Me silane), modifier D (OP emulsifier) and modifier E (phosphoric acid ester compd.). The compatibility of the modified starch and PE were improved to a certain degree, with that of modifier A improved most obviously. SEM anal. showed that the starch was well dispersed in PE, with a hazy interface, the initial decompn. temp. of the blend was higher than that of pure starch, and the processing temp. window of the blend was wider as detd. by TG and DSC. The mech. properties of modified starch/PE blends were all better than those of non-modified starch/PE blend, and the mech. properties of the blend modified by modifier A were the best.
ST modified starch polyethylene blend compatibility property
IT Fusion enthalpy
(compatibility, thermal and mech. property of modified starch-polyethylene blend)
IT Contact angle
(of water with starch modified with various modifiers)
IT **Polymer** morphology
(phase; compatibility, thermal and mech. property of **modified starch**-polyethylene blend)
IT **Polymer** blends
RL: **POF (Polymer in formulation)**; PRP (Properties); USES (Uses)
(polyethylene-**modified starch**; compatibility, thermal and mech. property of **modified starch** -polyethylene blend)
IT Surfactants
(starch modified with; compatibility, thermal and mech. property of modified starch-polyethylene blend)
IT Silanes
RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses)
(starch modified with; compatibility, thermal and mech. property of modified starch-polyethylene blend)
IT 7732-18-5, Water, properties
RL: PRP (Properties)
(contact angle of water with starch modified with various modifiers)
IT 9002-88-4, 1F7B
RL: **POF (Polymer in formulation)**; PRP (Properties); USES (Uses)
(low-d., modified **starch** blend; compatibility, thermal and mech. property of modified **starch**-polyethylene blend)
IT **9005-25-8, Starch**, properties
RL: **POF (Polymer in formulation)**; PRP (Properties); USES (Uses)
(modified, polyethylene blend; compatibility, thermal and mech. property of modified **starch**-polyethylene blend)
IT 7664-38-2D, Phosphoric acid, esters, properties 9000-92-4, Amylase 9036-19-5, OP
RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses)
(starch modified with; compatibility, thermal and mech. property of modified starch-polyethylene blend)

IT **9005-25-8, Starch**, properties
RL: **POF (Polymer in formulation)**; PRP (Properties); USES (Uses)
(modified, polyethylene blend; compatibility, thermal and mech. property of modified **starch**-polyethylene blend)
RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 25 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1997:315184 HCAPLUS
DN 126:294811
TI Water-resistant polymer compositions containing esterified starch, their molded products, and manufacture thereof
IN Tokiwa, Yutaka; Ueda, Takashi
PA Kogyo Gijutsuin, Japan; Chikyu Kankyo Sangyo Gijutsu K
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08L003-06
ICS B29C047-00; C08L067-02; C08L071-02; C08L101-00
CC 44-6 (Industrial Carbohydrates)
Section cross-reference(s): 37
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09067468	A2	19970311	JP 1995-245190	19950831
PRAI	JP 1995-245190		19950831		

AB The compns. are manufd. by melt mixing esterified starch with esterified (poly)glycerin and optional thermoplastic resins. The molded products are manufd. by melt mixing the compns. by using extruders and extruding the compns. through the dies of the extruders. Acetylated corn starch (esterification degree 3.0, water content 13%) was melt mixed with 40% triacetylglycerin, pelletized, and heat pressed to give a 0.2-mm-thick film showing breaking strength 522 N/cm2. Thin slices (thickness 100 .mu.m) (100 mg) of the pellets showed 2% solubilization in 20 mL water after 3 h at 30.degree..
ST water resistance esterified starch glycerin ester; acetylglycerin acetylated starch breaking strength; polyglycerin ester esterified starch water resistance
IT Polyesters, properties
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
(aliph.; water-resistant polymer compns. and molds with high strength contg. esterified starch and esterified (poly)glycerin)
IT Polymers, preparation
RL: **IMF (Industrial manufacture)**; **POF (Polymer in formulation)**; PRP (Properties); **PREP (Preparation)**; USES (Uses)
(biodegradable; water-resistant polymer compns. and molds with high strength contg. esterified **starch** and esterified (poly)glycerin)
IT Water-resistant materials
(water-resistant polymer compns. and molds with high strength contg. esterified starch and esterified (poly)glycerin)
IT Molded plastics, preparation
RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)
(water-resistant polymer compns. and molds with high strength contg.

esterified starch and esterified (poly)glycerin)
IT **9005-25-8**, Starch, reactions
RL: **RCT (Reactant); RACT (Reactant or reagent)**
(esterification of; water-resistant polymer compns. and molds with high strength contg. esterified starch and esterified (poly)glycerin)
IT 9002-88-4, Polyethylene
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
(low-d.; water-resistant polymer compns. and molds with high strength contg. esterified starch and esterified (poly)glycerin)
IT 106-31-0, Butyric anhydride 108-24-7, Acetic anhydride 123-62-6, Propionic anhydride
RL: RCT (Reactant); RACT (Reactant or reagent)
(starch esterification by; water-resistant polymer compns. and molds with high strength contg. esterified starch and esterified (poly)glycerin)
IT 9045-28-7P, **Starch** acetate 39433-68-6P, **Starch** propionate 144414-96-0P, **Starch** acetate butyrate
RL: **IMF (Industrial manufacture)**; **POF (Polymer in formulation)**; PRP (Properties); **PREP (Preparation)**; USES (Uses)
(water-resistant polymer compns. and molds with high strength contg. esterified **starch** and esterified (poly)glycerin)
IT 102-76-1, Triacetylglycerin 25395-31-7, Glycerin diacetate 25618-55-7D, Polyglycerin, esters 26446-35-5, Glycerin monoacetate
RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses)
(water-resistant polymer compns. and molds with high strength contg. esterified starch and esterified (poly)glycerin)
IT 24980-41-4, Polycaprolactone 25248-42-4, Polycaprolactone, sru
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
(water-resistant polymer compns. and molds with high strength contg. esterified starch and esterified (poly)glycerin)
IT **9005-25-8**, Starch, reactions
RL: **RCT (Reactant)**; **RACT (Reactant or reagent)**
(esterification of; water-resistant polymer compns. and molds with high strength contg. esterified starch and esterified (poly)glycerin)
RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 26 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1996:186084 HCAPLUS
DN 124:291248
TI Dispersing agents derived from anhydrides and their use for making filled polymer compositions
IN Blanchard, Pierre; Trouve, Patrick
PA Coatex S.A., Fr.
SO Eur. Pat. Appl., 24 pp.
CODEN: EPXXDW
DT Patent
LA French
IC ICM C07D307-89
ICS C08K005-15; C09D017-00
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): **46**
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI	EP 691336	A1	19960110	EP 1995-420156	19950613
	R: BE, DE, ES, FR, GB, IT				
	FR 2722204	A1	19960112	FR 1994-8782	19940708
	FR 2722204	B1	19960920		
	CA 2153358	AA	19960109	CA 1995-2153358	19950706
	US 5932641	A	19990803	US 1997-792877	19970131
PRAI	FR 1994-8782		19940708		
	US 1995-499330		19950707		

AB The title dispersing agents useful for inorg. or/and org. fillers added to polymers are derived from pyromellitic or benzophenonetetracarboxylic anhydride mono-esterified with C.ltoreq.40 alkyl groups via a polyoxyethylene or/and a polyoxypropylene bridge, or with C10-40 alkyl, aryl, arylalkyl, or branched polyaryl groups. Thus, mixing a propylene carbonate dissoln. of pyromellitic anhydride with tristyrylphenol and ethylene oxide prepd. a dispersing agent.

ST alkoxylate pyromellitic anhydride ester dispersant; filler dispersant pyromellitic ester thermoplastic; thermoset compn filler dispersant pyromellitate; benzophenonetetracarboxylic anhydride alkoxylate ester dispersant

IT Dispersing agents
(alkoxylated pyromellitic anhydride ethers and their use for making filled polymer compns.)

IT Glass, oxide
RL: MOA (Modifier or additive use); POF (Polymer in formulation); USES (Uses)
(beads or balloon fillers; dispersing agents derived from anhydrides and their use for making filled polymer compns.)

IT Coloring materials
Limestone, uses
RL: MOA (Modifier or additive use); POF (Polymer in formulation); USES (Uses)
(dispersing agents derived from anhydrides and their use for making filled polymer compns.)

IT Alkyd resins
RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PROC (Process); USES (Uses)
(dispersing agents derived from anhydrides and their use for making filled polymer compns.)

IT Epoxy resins, uses
RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PROC (Process); USES (Uses)
(dispersing agents derived from anhydrides and their use for making filled polymer compns.)

IT Phenolic resins, uses
RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PROC (Process); USES (Uses)
(dispersing agents derived from anhydrides and their use for making filled polymer compns.)

IT Urethane polymers, uses
RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PROC (Process); USES (Uses)
(dispersing agents derived from anhydrides and their use for making filled polymer compns.)

IT Carbon fibers, uses
Kaolin, uses
Mica-group minerals, uses
RL: MOA (Modifier or additive use); POF (Polymer in formulation); USES (Uses)

(filler; dispersing agents derived from anhydrides and their use for making filled polymer compns.)

IT Rubber, synthetic
RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PROC (Process); USES (Uses)
(EPDM, dispersing agents derived from anhydrides and their use for making filled polymer compns.)

IT Synthetic fibers, polymeric
RL: MOA (Modifier or additive use); POF (Polymer in formulation); USES (Uses)
(cellulosic, filler; dispersing agents derived from anhydrides and their use for making filled polymer compns.)

IT Polyoxyalkylenes, preparation
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(esters, with tetracarboxylic anhydride; dispersing agents derived from and their use for making filled polymer compns.)

IT Polyesters, uses
RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PROC (Process); USES (Uses)
(unsatd., dispersing agents derived from anhydrides and their use for making filled polymer compns.)

IT 89-32-7DP, esters with polyalkylene glycols or polyalkylene glycol ethers 174729-11-4P 174794-17-3P 174819-55-7P 174819-56-8P 175133-84-3P 176198-08-6P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(dispersing agents derived from and their use for making filled polymer compns.)

IT 9002-86-2, PVC 9002-88-4 9003-07-0, Polypropylene 9003-53-6 9010-77-9, Acrylic acid-ethylene copolymer 9010-86-0, Ethyl acrylate-ethylene copolymer 24937-78-8, Ethylene-vinyl acetate copolymer 25103-74-6, Ethylene-methyl acrylate copolymer 25750-84-9, Butyl acrylate-ethylene copolymer 39475-61-1, Palatal P4 61722-01-8, Butylene-ethylene-propylene copolymer 110900-80-6D, Butadiene-ethylene-styrene block copolymer, modified 174794-78-6, Norsodyne I 2984V
RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PROC (Process); USES (Uses)
(dispersing agents derived from anhydrides and their use for making filled polymer compns.)

IT 123-77-3, Azodicarbonamide 471-34-1, Calcium carbonate, uses 546-93-0, Magnesium carbonate 1309-42-8, Magnesium hydroxide 1309-48-4, Magnesium oxide, uses 1314-13-2, Zinc oxide, uses 1332-37-2, Iron oxide, uses 7631-86-9, Silica, uses 7727-43-7, Barium sulfate **9005-25-8, Starch,** uses 13463-67-7, Titania, uses 13983-17-0, Wollastonite 14807-96-6, Talc, uses 21645-51-2, Aluminum hydroxide, uses
RL: MOA (Modifier or additive use); **POF (Polymer in formulation)**; USES (Uses)
(filler; dispersing agents derived from anhydrides and their use for making filled polymer compns.)

IT **9005-25-8, Starch,** uses
RL: MOA (Modifier or additive use); **POF (Polymer in formulation)**; USES (Uses)
(filler; dispersing agents derived from anhydrides and their use for making filled polymer compns.)

RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 27 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1995:878980 HCAPLUS
DN 123:259408
TI High water-absorbency plastic foams and their preparation
IN Xu, Lingyun
PA Huayi Economic Scientific and Technical Industry Co., Shanghai, Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 4 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
IC ICM C08J009-00
ICS C08L029-04; C08L003-02
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 44, **46**
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1095075	A	19941116	CN 1994-112140	19940428
PRAI	CN 1994-112140		19940428		

AB The title open-cell foams are prepd. from poly(vinyl alc.) 100, corn or wheat starch 10-100, aldehydes (e.g., formaldehyde, glyoxal, adipic dialdehyde) 50-200, surfactants (e.g., polyethylene glycol, Span 60, Tween 80) 1-30, catalysts (e.g., sulfuric acid) 100-500 parts, and defoaming agents.
ST water absorbent polyvinyl alc starch; aldehyde polyvinyl alc open cell foam; surfactant polyvinyl alc open cell foam; catalyst sulfuric acid polyvinyl alc foam
IT Siloxanes and Silicones, uses
RL: MOA (Modifier or additive use); USES (Uses)
(defoaming agents; high water-absorbency plastic foams and their prepn.)
IT Antifoaming agents
Catalysts and Catalysis
Surfactants
(high water-absorbency plastic foams and their prepn.)
IT Aldehydes, uses
RL: MOA (Modifier or additive use); USES (Uses)
(high water-absorbency plastic foams and their prepn.)
IT Plastics, cellular
RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PRP (Properties); PROC (Process); USES (Uses)
(high water-absorbency plastic foams and their prepn.)
IT 7664-93-9, Sulfuric acid, uses
RL: CAT (Catalyst use); USES (Uses)
(high water-absorbency plastic foams and their prepn.)
IT 50-00-0, Formaldehyde, uses 107-22-2, Glyoxal 1072-21-5, Adipic dialdehyde
RL: MOA (Modifier or additive use); USES (Uses)
(high water-absorbency plastic foams and their prepn.)
IT 9002-89-5, Poly(vinyl alcohol) **9005-25-8, Starch,** uses
RL: PEP (Physical, engineering or chemical process); **POF (Polymer in formulation);** PRP (Properties); PROC (Process); USES (Uses)
(high water-absorbency plastic foams and their prepn.)
IT 1338-41-6, Span 60 9005-65-6, Tween 80 25322-68-3, Polyethylene glycol

RL: MOA (Modifier or additive use); USES (Uses)
(surfactants; high water-absorbency plastic foams and their prepn.)
IT **9005-25-8, Starch,** uses
RL: PEP (Physical, engineering or chemical process); **POF (Polymer in formulation)**; PRP (Properties); PROC (Process); USES (Uses)
(high water-absorbency plastic foams and their prepn.)
RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 28 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1995:748891 HCAPLUS
DN 123:343296
TI Starch-based sizing agent for dress
IN Zhang, Yinmao
PA Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 4 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
IC ICM D06M015-11
ICS D06M015-53
CC 40-9 (Textiles and Fibers)
Section cross-reference(s): **46**
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1098754	A	19950215	CN 1993-109700	19930812
PRAI	CN 1993-109700		19930812		

AB The title agent, giving good antistatic property to the treated dress, is prepd. by dissolving (water-sol.) starch, nonionic surfactants (e.g., nonylphenol polyoxyethylene ether, polyoxyethylene alkyl ether, Tween), essential oil, and fungicides (e.g., Na lactate, Ca lactate, Na benzoate) in water.
ST starch based dress sizing agent; nonylphenol polyoxyethylene ether starch sizing; Tween starch sizing agent antistatic; essential oil starch sizing agent; fungicide starch sizing agent; sodium lactate starch sizing agent; calcium lactate starch sizing agent; benzoate sodium starch sizing agent
IT Fungicides and Fungistats
Sizes
(starch-based sizing agent for dress)
IT Essential oils
RL: MOA (Modifier or additive use); USES (Uses)
(starch-based sizing agent for dress)
IT Surfactants
(nonionic, starch-based sizing agent for dress)
IT 72-17-3, Sodium lactate 532-32-1, Sodium benzoate 814-80-2, Calcium lactate
RL: MOA (Modifier or additive use); USES (Uses)
(fungicides; starch-based sizing agent for dress)
IT **9005-25-8, Starch,** uses
RL: **POF (Polymer in formulation)**; TEM (Technical or engineered material use); USES (Uses)
(**starch**-based sizing agent for dress)
IT 9016-45-9, Polyoxyethylene nonylphenyl ether 25322-68-3D, alkyl ether
RL: MOA (Modifier or additive use); USES (Uses)
(surfactants; starch-based sizing agent for dress)

IT **9005-25-8, Starch,** uses
RL: **POF (Polymer in formulation)**; TEM (Technical or engineered material use); USES (Uses)
(**starch**-based sizing agent for dress)
RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 29 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1995:255340 HCAPLUS
DN 122:12593
TI Granular acidic cleaners especially for interiors of dishwashing machines
IN Delwel, Francois; Gaudefroy, Charles Francois
PA Unilever N. V., Neth.
SO Eur. Pat. Appl., 7 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM C11D011-00
ICS C11D017-06; C11D017-04; C11D003-20; C11D007-08; B01J002-28
CC 46-6 (Surface Active Agents and **Detergents**)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 612843	A1	19940831	EP 1993-200494	19930222
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
PRAI EP 1993-200494		19930222		

AB The title cleaners contain an acid such as sulfamic, maleic, or citric acid and are granulated with a binder comprising an inert water-insol. powder (e.g., **starch** or aluminosilicate) and an aq. soln. of a film-forming **polymer** (e.g., **polymer** of .gtoreq.1 unsatd. carboxylic acid) or an inert water-sol. powder (e.g., **modified starch** or maltodextrin) and water or an aq. soln. of a film-forming **polymer**. A cleaner for the interiors of dishwashing machines is packaged in a unit-dose 2-compartment container, e.g., contg. sulfamic and citric acids in sep. compartments.
ST carboxylic acid granulation cleaner dishwasher; maleic acid granulation cleaner dishwasher; sulfamic acid granulation cleaner dishwasher; citric acid granulation cleaner dishwasher; starch granulation acid cleaner; aluminosilicate granulation acid cleaner; polymer granulation acid cleaner; binder granulation acid cleaner
IT Carboxylic acids, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(in granulated cleaners for dishwashing machines)
IT Binding materials
(in granulation of acid cleaners for dishwashing machines)
IT Dishwashing
(machines; granulated acid compns. for cleaning interiors of)
IT Granulation
(of acid cleaners for dishwashing machines)
IT Detergents
(cleaning compns., granulated acid compns. for interiors of dishwashing machines)
IT Carboxylic acids, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polymers, in granulation of acid cleaners for dishwashing machines)
IT 77-92-9, Citric acid, uses 110-16-7, Maleic acid, uses 5329-14-6,

Sulfamic acid
RL: TEM (Technical or engineered material use); USES (Uses)
(in granulated cleaners for dishwashing machines)
IT **9005-25-8**, Starch, uses **9005-25-8D**, Starch, derivs.
9050-36-6, Maltodextrin
RL: TEM (Technical or engineered material use); USES (Uses)
(in granulation of acid cleaners for dishwashing machines)
IT **9005-25-8**, Starch, uses **9005-25-8D**, Starch, derivs.
RL: TEM (Technical or engineered material use); USES (Uses)
(in granulation of acid cleaners for dishwashing machines)
RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

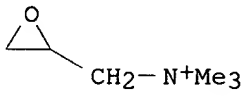
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 30 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1994:485654 HCAPLUS
DN 121:85654
TI Water-based lubricants for finishing automobile interior sheet **fabrics**
IN Takahashi, Juichi
PA Kao Corp, Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM D06M013-02
ICS D06M015-11
CC 40-7 (Textiles and Fibers)
Section cross-reference(s): 45, 46
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05331766	A2	19931214	JP 1992-136502	19920528
PRAI	JP 1992-136502		19920528		

AB Title lubricants, showing reduced fogging of automobile parts (e.g., glass), contain .gtoreq.1 wax selected from hydrocarbon (oxides) and animal or plant-derived waxes and composites of cationic starch and anionic polymers. Thus, 93 parts powd. starch was cationized with glycidyltrimethylammonium chloride, dissolved in hot water, and mixed with 7 parts naphthalenesulfonic acid-HCHO copolymer Na salt, and the resulting compn. (solids 5%) was mixed with 25% paraffin wax, melted at 75-90.degree., emulsified, and cooled to give an aq. dispersion lubricant, which was applied onto a dyed PET **fabric** to give a product showing no fogging on a glass plate by a specified test.
ST lubricant aq dispersion automobile interior **fabric**; fogging prevention automobile interior **fabric** lubricant; wax cationic starch lubricant; paraffin wax lubricant automobile interior **fabric**
IT Paraffin waxes and Hydrocarbon waxes, uses
Waxes and Waxy substances
RL: USES (Uses)
(aq. lubricants contg. cationized starch composites and, for automobile interior sheet **fabrics**, for prevention of fogging)

IT Phenolic resins, uses
RL: USES (Uses)
(composites with cationized starch, aq. lubricants contg. waxes and, for automobile interior sheet **fabrics**, for prevention of fogging)
IT Polyester fibers, uses
RL: USES (Uses)
(**fabrics**, for automobile interiors, lubricants contg. waxes and cationized starch composites with anionic polymers as finishes for reduced fogging for)
IT Lubricants
(for automobile interior **fabrics**, contg. waxes and cationized starch composites with anionic polymers, for prevention of fogging)
IT 25038-59-9, PET, uses
RL: USES (Uses)
(fiber, **fabrics**, for automobile interiors, lubricants contg. waxes and cationized starch composites with anionic polymers as finishes for reduced fogging for)
IT **3033-77-0D**, Glycidyltrimethylammonium chloride, reaction products with **starch**, composites with anionic polymers 9005-25-8D, Starch, cationized, reaction products with anionic polymers 9084-06-4D, reaction products with cationized starch
RL: USES (Uses)
(lubricants contg. waxes and, for automobile interior **fabrics**, for reduced fogging)
IT **3033-77-0D**, Glycidyltrimethylammonium chloride, reaction products with **starch**, composites with anionic polymers
RL: USES (Uses)
(lubricants contg. waxes and, for automobile interior **fabrics**, for reduced fogging)
RN 3033-77-0 HCAPLUS
CN Oxiranemethanaminium, N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



L41 ANSWER 31 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1994:32810 HCAPLUS
DN 120:32810
TI Cationic lubricants for fibers and their manufacture
IN Takahashi, Juichi; Nakane, Shoji; Okamura, Masami
PA Kao Corp, Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM D06M015-11
ICS C08L091-00; D06L003-12; D06M013-02
CC 40-7 (Textiles and Fibers)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05247845	A2	19930924	JP 1992-45619	19920303
PRAI	JP 1992-45619		19920303		

AB Title lubricants comprise (A) .gtoreq.1 waxes selected from hydrocarbon waxes, their oxides, and animal or plant waxes and (B) aq. dispersions contg. cationized starch or its complexes with anionic polymers and are manufd. by dissolving cationized starch in H2O under heating, adding anionic polymers in the solns., stirring them under heating, adding waxes to them, and dispersing them at above m.p. of the waxes and .ltoreq.100.degree.. Thus, dissolving 5% (product basis) starch cationized with glycidyltrimethylammonium chloride in H2O, adding 25% (product basis) 135.degree.F-paraffin wax to the soln. at 70-90.degree., and emulsifying them gave a lubricant. A cotton **fabric** contg. a fluorescent brightener was padded with a soln. contg. 0.8% the lubricant, squeezed, and dried at 140.degree. to give a test piece showing good yellowing resistance.

ST cationized starch wax lubricant fiber; yellowing resistance cationic lubricant fiber

IT Lubricants
(contg. cationized starch and waxes, for fibers, with good yellowing resistance)

IT Paraffin waxes and Hydrocarbon waxes, uses
Waxes and Waxy substances
RL: USES (Uses)
(lubricants contg., cationized starch and, for fibers, with good yellowing resistance)

IT Synthetic fibers, polymeric
RL: USES (Uses)
(lubricants for, contg. cationized starch and waxes, with good yellowing resistance)

IT Creosote oil
RL: USES (Uses)
(sulfonated, polymers, with formaldehyde, sodium salts, lubricants contg., cationized starch and waxes and, for fibers, with good yellowing resistance)

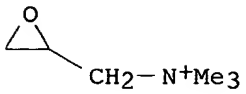
IT 50-00-0D, Formaldehyde, polymers with creosote oil sulfonic acids, sodium salts 9080-79-9, Poly(styrenesulfonic acid) sodium salt 9084-06-4, Formaldehyde-naphthalenesulfonic acid copolymer sodium salt 30915-61-8, Poly(maleic acid) sodium salt 37199-81-8, Diisobutylene-maleic anhydride copolymer sodium salt
RL: USES (Uses)
(lubricants contg., cationized starch and waxes and, for fibers, with good yellowing resistance)

IT 100-35-6D, 2-Diethylaminoethyl chloride, reaction products with starch 2917-91-1D, 3-Diethylamino-1,2-epoxypropane, reaction products with starch **3033-77-0D**, Glycidyltrimethylammonium chloride, reaction products with **starch** 9005-25-8D, Starch, cationized
RL: USES (Uses)
(lubricants contg., waxes and, for fibers, with good yellowing resistance)

IT **3033-77-0D**, Glycidyltrimethylammonium chloride, reaction products with **starch**
RL: USES (Uses)
(lubricants contg., waxes and, for fibers, with good yellowing resistance)

RN 3033-77-0 HCAPLUS

CN Oxiranemethanaminium, N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

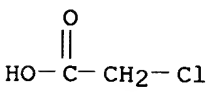


L41 ANSWER 32 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1990:517016 HCAPLUS
DN 113:117016
TI Printing pastes containing carboxylmethylated starch-cellulose mixtures
IN Kako, Shigetoshi; Tokunaga, Mototsugu
PA Daiichi Kogyo Seiyaku Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM D06P001-50
CC 40-6 (Textiles and Fibers)
Section cross-reference(s): 44
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 02104776	A2	19900417	JP 1988-255282	19881011
PRAI	JP 1988-255282		19881011		

AB The title pastes used in printing with direct dyes, acid dyes, vat dyes, disperse dyes, naphthol dyes, and Rapidogen dyes contain alkali salts of carboxymethylated starch-cellulose mixts. with av. substitution degree (S) .gtoreq.0.5. Thus, 500 g sweet potato starch-cellulose mixt. was stirred in MeOH contg. 284.0 g NaOH at 30.degree. for 60 min and treated with a soln. of 312.0 g ClCH2CO2H in MeOH at 40-65.degree. to give a product with S 1.03 and NaCl content 0.90%. A polyester twill **fabric** was screen printed with a paste contg. Kayalon Polyester Blue 2R-SF and the product, dried, steamed, washed, soaped, washed, and dried to give printed **fabric** with good leveling.
ST printing paste carboxylmethyl starch cellulose; direct dye printing paste; acid dye printing paste; vat dye printing paste; disperse dye printing paste; naphthol dye printing paste; polyester printing paste starch cellulose
IT Dyes
(naphthol, for textile printing, pastes contg. alkali salts of carboxymethylated starch-cellulose mixts. for)
IT Textile printing
(pastes contg. alkali salts of carboxylmethylated starch-cellulose mixts. for)
IT Polyamide fibers, uses and miscellaneous
Polyester fibers, uses and miscellaneous
RL: USES (Uses)
(printing of, pastes contg. alkali salts of carboxylmethylated starch-cellulose mixts. for)
IT Dyes

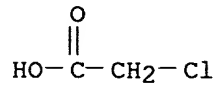
(acid, for textile printing, pastes contg. alkali salts of carboxymethylated starch-cellulose mixts. for)
IT Dyes
(direct, for textile printing, pastes contg. alkali salts of carboxymethylated starch-cellulose mixts. for)
IT Dyes
(disperse, for textile printing, pastes contg. alkali salts of carboxymethylated starch-cellulose mixts. for)
IT Dyes
(vat, for textile printing, pastes contg. alkali salts of carboxymethylated starch-cellulose mixts. for)
IT 9004-34-6
RL: USES (Uses)
(dyes, acid, for textile printing, pastes contg. alkali salts of carboxymethylated starch-cellulose mixts. for)
IT 9004-34-6
RL: USES (Uses)
(dyes, direct, for textile printing, pastes contg. alkali salts of carboxymethylated starch-cellulose mixts. for)
IT 9004-34-6
RL: USES (Uses)
(dyes, disperse, for textile printing, pastes contg. alkali salts of carboxymethylated starch-cellulose mixts. for)
IT 9004-34-6
RL: USES (Uses)
(dyes, naphthol, for textile printing, pastes contg. alkali salts of carboxymethylated starch-cellulose mixts. for)
IT 9004-34-6
RL: USES (Uses)
(dyes, vat, for textile printing, pastes contg. alkali salts of carboxymethylated starch-cellulose mixts. for)
IT 9004-32-4P, Cellulose carboxymethyl ether sodium salt 9063-38-1P, Starch carboxymethyl ether sodium salt
RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of, for printing pastes)
IT 3351-05-1, Telon Fast Navy Blue R 88650-93-5, Kayalon Polyester Blue 2R-SF 129290-85-3, C.I. Direct Blue 236
RL: USES (Uses)
(printing by, pastes contg. alkali salts of carboxymethylated starch-cellulose mixts. for)
IT 9004-34-6, Cellulose, reactions 9005-25-8, Starch, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with chloroacetic acid)
IT **79-11-8**, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with **starch**-cellulose mixt.)
IT **79-11-8**, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with **starch**-cellulose mixt.)
RN 79-11-8 HCAPLUS
CN Acetic acid, chloro- (8CI, 9CI) (CA INDEX NAME)



L41 ANSWER 33 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1990:461248 HCAPLUS
DN 113:61248
TI Printing pastes containing carboxylmethylated starch-cellulose mixtures
IN Kako, Shigetoshi; Tokunaga, Mototsugu
PA Daiichi Kogyo Seiyaku Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM D06P001-48
ICS D06M015-11
CC 40-6 (Textiles and Fibers)
Section cross-reference(s): 44
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 02091282	A2	19900330	JP 1988-243711	19880927
PRAI JP 1988-243711		19880927		

AB The title pastes used in printing with reactive dyes contain alkali salts of carboxylmethylated starch-cellulose mixts. with av. substitution degree (S) .gtoreq.1.3. Thus, 500 g sweet potato starch-cellulose mixt. was stirred in MeOH contg. 412.3 g NaOH at 30.degree. for 60 min and treated with a soln. of 463.4 g ClCH2CO2H at 40-65.degree. to give a product with S 1.53 and NaCl content 0.35%. A cotton cloth was screen printed with a paste contg. Cibacron Pront Turquoise G and the product, dried, steamed, washed, soaped, washed, and dried to give printed **fabric** with good leveling.
ST printing paste carboxylmethyl starch cellulose; reactive dye printing paste; cotton printing paste starch cellulose
IT Textile printing
(by reactive dyes, pastes contg. alkali salts of carboxylmethylated starch-cellulose mixts. for)
IT Dyes, reactive
(for textile printing, pastes contg. alkali salts of carboxymethyled starch-cellulose mixts. for)
IT 9004-32-4P, Cellulose carboxymethyl ether sodium salt 9063-38-1P, Starch carboxymethyl ether sodium salt
RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of, for printing pastes)
IT 12731-64-5, Cibacron Pront Turquoise G
RL: USES (Uses)
(printing by, pastes contg. alkali salts of carboxymethylated starch-cellulose mixts. for)
IT 9004-34-6, Cellulose, reactions 9005-25-8, Starch, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with chloroacetic acid)
IT **79-11-8**, Monochloroacetic acid, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with **starch**-cellulose mixt.)
IT **79-11-8**, Monochloroacetic acid, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with **starch**-cellulose mixt.)
RN 79-11-8 HCAPLUS
CN Acetic acid, chloro- (8CI, 9CI) (CA INDEX NAME)

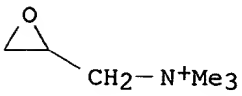


L41 ANSWER 34 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1989:424923 HCAPLUS
DN 111:24923
TI Manufacture of cold water-dispersible sizing agents for fibers
IN Yoneyama, Emi; Fujino, Hiroshi
PA Sanwa Shoji K. K., Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM D06M013-46
ICS D06M015-11
CC 40-9 (Textiles and Fibers)
Section cross-reference(s): 44, 46
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 01052877	A2	19890228	JP 1987-210701	19870825
	JP 07018088	B4	19950301		
PRAI	JP 1987-210701		19870825		

OS MARPAT 111:24923
AB Low-temp. title agents with excellent adhesion to fibers, useful as laundry starch, are manufd. by cationizing starch with epoxy-contg. quaternary ammonium compds., optionally mixing with alkali and water, and heating at .gtoreq.100.degree. and water content of 13-27%. Thus, 30 kg corn starch was stirred with 2.1 kg Catiomaster G (2,3-epoxypropyltrimethylammonium chloride) and 3 kg 0.4% aq. NaOH to give a mixt. with water content 20.5%, which was heated 4 h at 125.degree. and adjusted to water content 13% to give title sizing agent with size-forming temp. 38.degree., good dyeability, and adhesion 2.56% to cotton and 1.87% to polyester-cotton **fabric**, vs., 82, poor, 1.85, and 1.05, resp., for corn starch.
ST laundry starch cold water dispersing; size fiber cationized starch; sizing agent **fabric** cationized starch
IT Sizes
(cationized starch, cold water-dispersible, for **fabrics**)
IT Quaternary ammonium compounds, compounds
RL: USES (Uses)
(trialkyl(epoxyalkyl), reaction products, with starch, sizing agents, for **fabrics**)
IT 9005-25-8
RL: USES (Uses)
(sizes, cationized starch, cold water-dispersible, for **fabrics**)
IT **3033-77-0D**, 2,3-Epoxypropyltrimethylammonium chloride, reaction products with **starch** 9005-25-8D, Starch, reaction products with epoxypropyltrimethylammonium chloride
RL: USES (Uses)
(sizing agents, cold water-dispersible, for **fabrics**)
IT **3033-77-0D**, 2,3-Epoxypropyltrimethylammonium chloride, reaction products with **starch**
RL: USES (Uses)

(sizing agents, cold water-dispersible, for **fabrics**)
RN 3033-77-0 HCAPLUS
CN Oxiranemethanaminium, N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



L41 ANSWER 35 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1987:619111 HCAPLUS
DN 107:219111
TI Powdered starching agents for laundered fabrics
IN Ohira, Kozo; Iguchi, Kazuo
PA Kao Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM D06M015-11
ICS D06M013-46; D06M015-00; D06M015-643
ICA D06M011-04
CC 40-9 (Textiles and Fibers)
Section cross-reference(s): **46**
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 62117878	A2	19870529	JP 1985-248511	19851106
	JP 01018187	B4	19890404		
PRAI	JP 1985-248511		19851106		

AB Powd. mixts. comprising .alpha.-**modified starch** and/or processed **starch** 100, Na2SO4 1-20, silicone 0.01-3, cationic surfactants or cationic **polymers** 0.1-15 parts and contg. .gtoreq.70% particles with diam. 40-250 .mu. have improved dispersibility in H2O, and are useful for starching laundered fabrics with improved uniformity and good stiffness. Thus, **starch** 100, Na2SO4 5, hydroxy(trimethylamino)propyl **starch** 2, H2O 110 parts were mixed at 150.degree., dried, and pulverized to give .alpha.-**modified starch**-particles. These particles were then mixed with 2.5 parts siloxane to give a powder contg. 75% particles with diam. 40-250 .mu. and having good dispersibility in H2O and good starching uniformity, in contrast to a similar compn. contg. 60% particles with diam. 40-250 .mu..
ST dispersibility powd **starch** starching agent; siloxane additive powd starching agent; cationic **polymer** additive powd **starch**; **starch modified** powd starching agent
IT Siloxanes and Silicones, uses and miscellaneous
RL: USES (Uses)
(modified starch powder starching agents contg., for improved dispersibility in water)
IT Particle size
(of powd. starching agents, control of, for improved dispersibility in

water)
IT Textiles
Wearing apparel
(starching agents for, **modified** powd. **starch** contg. cationic **polymers** or surfactants, sodium sulfate and siloxane as, with improved dispersibility in water)
IT Sizes
(starching agents, powd., **modified starch** contg. cationic **polymers** or surfactant, sodium sulfate and siloxanes as, with improved dispersibility in water, particle size control of)
IT Siloxanes and Silicones, uses and miscellaneous
RL: USES (Uses)
(di-Me, modified starch powder starching agents contg., for improved dispersibility in water)
IT Quaternary ammonium compounds, uses and miscellaneous
RL: USES (Uses)
(tetraalkyl, modified starch powder starching agents contg., for improved fabric stiffness)
IT 112-00-5, Lauryl trimethylammonium chloride 9004-34-6D, Cellulose, cationized 9063-45-0 18448-65-2, Bis(hydroxyethyl)methyloleylammonium chloride 28826-65-5 74070-70-5 81859-24-7, JR 400 82703-31-9, Didecyldimethylammonium methosulfate 111367-37-4 111367-39-6 111367-41-0
RL: USES (Uses)
(modified starch powder starching agents contg., for improved fabric stiffness)
IT 7757-82-6, Sodium sulfate, uses and miscellaneous
RL: USES (Uses)
(modified starch powder starching agents contg., for increased soly. in water)
IT **9005-25-8**
RL: USES (Uses)
(sizes, starching agents, powd., **modified starch** contg. cationic **polymers** or surfactant, sodium sulfate and siloxanes as, with improved dispersibility in water, particle size control of)
IT **9005-25-8D, Starch,** alpha-**modified**
9049-76-7, Hydroxypropyl starch
RL: USES (Uses)
(starching agents, powd., contg. sodium sulfate, siloxanes and cationic **polymers** or surfactants, with improved dispersibility in water)
IT **9005-25-8**
RL: USES (Uses)
(sizes, starching agents, powd., **modified starch** contg. cationic **polymers** or surfactant, sodium sulfate and siloxanes as, with improved dispersibility in water, particle size control of)
RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **9005-25-8D, Starch,** alpha-**modified**
RL: USES (Uses)
(starching agents, powd., contg. sodium sulfate, siloxanes and cationic **polymers** or surfactants, with improved dispersibility in water)
RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 36 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1987:619110 HCAPLUS
DN 107:219110
TI Powdered starching agents for laundered fabrics
IN Ohira, Kozo; Iguchi, Kazuo
PA Kao Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM D06M015-11
ICS D06M013-46; D06M015-00
CC 40-9 (Textiles and Fibers)
Section cross-reference(s): **46**
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 62117876	A2	19870529	JP 1985-248509	19851106
	JP 01018185	B4	19890404		
PRAI	JP 1985-248509		19851106		

AB Powd. mixts. comprising 100 parts .alpha.-**modified** **starch** and/or processed **starch** and 0.1-15 parts cationic surfactants or cationic **polymers** and contg. .gtoreq.70% particles with diam. 40-250 .mu. have improved dispersibility in H2O, and are useful for starching laundered fabrics with improved uniformity and good stiffness. Thus, **starch** 100, hydroxy(trimethylamino)propyl **starch** 2, and H2O 100 parts were mixed at 150.degree., dried, and pulverized to give a powder contg. 75% particles with diam. 40-250 .mu. and having good dispersibility in H2O, in contrast to a similar compn. contg. 60% particles with diam. 40-250 .mu..
ST **starch modified** powd starching agent; dispersibility powd **starch** starching agent; cationic **polymer** additive powd **starch**; surfactant cationic additive powd **starch**
IT Quaternary ammonium compounds, uses and miscellaneous
RL: USES (Uses)
(modified powd. starch starching agents contg., for improved fabric stiffness)
IT Particle size
(of powd. starching agents, control of, for improved dispersibility in water)
IT Textiles
Wearing apparel
(starching agents for, **modified** powd. **starch** contg. cationic **polymers** or cationic surfactants as, with improved dispersibility in water)
IT Sizes
(starching agents, powd., **modified starch** contg. cationic **polymers** or cationic surfactants as, with improved dispersibility in water, particle size control of)
IT Surfactants
(cationic, modified powd. starch starching agents contg., for improved fabric stiffness)
IT 112-00-5, Lauryl trimethylammonium chloride 9063-45-0 18448-65-2 28826-65-5 81859-24-7, JR 400 82703-31-9, Didecyldimethylammonium methosulfate 89004-51-3 111367-37-4 111367-39-6 111367-41-0
RL: USES (Uses)

(modified powd. starch starching agents contg., for improved fabric stiffness)
IT **9005-25-8**
RL: USES (Uses)
(sizes, starching agents, powd., **modified starch** contg. cationic **polymers** or cationic surfactants as, with improved dispersibility in water, particle size control of)
IT **9005-25-8D, Starch**, alpha-**modified**
RL: USES (Uses)
(starching agents, powd., contg. cationic surfactants or cationic **polymers**, for fabrics, with improved dispersibility in water)
IT **9005-25-8**
RL: USES (Uses)
(sizes, starching agents, powd., **modified starch** contg. cationic **polymers** or cationic surfactants as, with improved dispersibility in water, particle size control of)
RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **9005-25-8D, Starch**, alpha-**modified**
RL: USES (Uses)
(starching agents, powd., contg. cationic surfactants or cationic **polymers**, for fabrics, with improved dispersibility in water)
RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

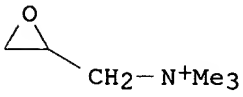
L41 ANSWER 37 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1982:583916 HCAPLUS
DN 97:183916
TI Antistatic agents for synthetic fibers
PA Kao Soap Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC D06M015-04; D06M011-04; D06M011-08; D06M013-36; D06M015-20
CC 40-9 (Textiles)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 57082576	A2	19820524	JP 1980-159041	19801112
	JP 59053396	B4	19841225		
PRAI	JP 1980-159041		19801112		

AB Synthetic fibers finished with compns. contg. cationic cellulose (I), cationic starch, or a chitosan inorg. acid salt and RR1R2PO4, where R, R1, or R2 is H, NH4, or alkali metal, and (or) a deliquescent or hygroscopic amine salt have improved antistatic properties at low relative humidity. Thus, a polyester jersey was immersed in an aq. compn. contg. 0.02% I (Polymer JR 30M [55466-13-2]) and 0.15% guanidine hydrochloride (II) [50-01-1] to 90% pickup, dried, and heat-treated 1 min at 180.degree.. The electrostatic charge of the treated **fabric** at 20% relative humidity was 100 V, compared with 11,000 V for a **fabric** finished with a similar compn. without II.
ST cellulose cationic antistatic agent; guanidine hydrochloride antistatic agent; polyester fiber antistatic finishing; antistatic finishing

synthetic fiber
IT Acrylic fibers, uses and miscellaneous
RL: USES (Uses)
(antistatic agents for, cationic cellulose and calcium chloride and (or) potassium dihydrogen phosphate as)
IT Polyamide fibers, uses and miscellaneous
RL: USES (Uses)
(antistatic agents for, cationic starch and guanidine hydrochloride or sodium dihydrogen phosphate as)
IT Polyester fibers, uses and miscellaneous
RL: USES (Uses)
(antistatic agents for, cationic starch or cationic cellulose and amine salts and (or) phosphoric acid salts as)
IT Antistatic agents
(cationic cellulose, cationic starch or chitosan hydrochloride and amine salts and (or) phosphoric acid salts, for synthetic fibers)
IT 593-51-1 1302-42-7 7447-41-8, uses and miscellaneous 7646-93-7
RL: USES (Uses)
(antistatic agents contg., for synthetic fibers)
IT 81859-24-7
RL: USES (Uses)
(antistatic agents, contg. calcium chloride and (or) potassium dihydrogen phosphate, for acrylic fibers)
IT 7778-77-0 10043-52-4, uses and miscellaneous
RL: USES (Uses)
(antistatic agents, contg. cationic cellulose for acrylic fibers)
IT 50-01-1
RL: USES (Uses)
(antistatic agents, contg. cationic cellulose or cationic starch, for synthetic fibers)
IT 7722-76-1
RL: USES (Uses)
(antistatic agents, contg. cationic cellulose, for polyester fibers)
IT 7790-69-4 13453-80-0
RL: USES (Uses)
(antistatic agents, contg. chitosan hydrochloride, for polyester fibers)
IT 81859-24-7
RL: USES (Uses)
(antistatic agents, contg. guanidine hydrochloride and (or) ammonium dihydrogen phosphate, for polyester fibers)
IT **3033-77-0D**, reaction products with **starch**
RL: USES (Uses)
(antistatic agents, for nylon fibers)
IT 7558-80-7
RL: USES (Uses)
(antistatic agents, with cationic starch, for nylon fibers)
IT 9005-25-8D, reaction products with glycidyltrimethyl ammonium chloride
RL: USES (Uses)
(antistatic agents, with guanidine hydrochloride or sodium dihyrogen phosphate, for nylon fibers)
IT 70694-72-3
RL: USES (Uses)
(antistatic agents, with lithium nitrate or lithium dihydrogen phosphate, for polyester fibers)
IT 9004-34-6D, cationic
RL: USES (Uses)
(antistatic agents, with phosphoric acid salts or amine salts, for

synthetic fibers)
IT **3033-77-0D**, reaction products with **starch**
RL: USES (Uses)
(antistatic agents, for nylon fibers)
RN 3033-77-0 HCAPLUS
CN Oxiranemethanaminium, N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



L41 ANSWER 38 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1980:112635 HCAPLUS
DN 92:112635
TI Metal-containing soap
IN Merkl, George G.
PA USA
SO U.S., 13 pp.
CODEN: USXXAM
DT Patent
LA English
IC C11D009-38; C11D013-00
NCL 252117000
CC 46-2 (Surface Active Agents and **Detergents**)
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4182685	A	19800108	US 1977-758346	19770110
PRAI	US 1974-534084		19741223		

AB A water-sol., inorg., amide group-contg. monomeric or **polymeric** complex contg. Na and another metal is prepd. by the reaction of Si, Mo, Al, Zr, Ti, W, Mg, or Zn with aq. NH3 and NaOH. The complex is treated with tallow fatty acids to prep. industrial and detergent soaps. In some cases, a **starch modified** with the metal-contg. complex is added to the soaps to give improved foaming and water retention or H2O2 is added to provide bleaching properties. The reaction of the metal with aq. NH3 and NaOH proceeds through a first endothermic phase to give a monomeric complex and then through an exothermic phase to form a **polymeric** complex. Thus, a mixt. of 616 g Si and 1925 g aq. NH3 (28.degree. Be) was treated slowly with 440 g NaOH to cause an endothermic reaction, 320 g unreacted Si was removed, 500 mL H2O was added, and 12 g of the aq. soln. of the monomer complex contg. Si and Na was mixed with 13.7 g tallow fatty acids to prep. a powd. soap.
ST metal amide complex soap; bleach peroxide soap complex; starch metal complex soap; ammonia metal complex soap; transition metal amide complex soap
IT Transition metals, compounds
RL: USES (Uses)
(complexes with ammonia and sodium, salts with fatty acids, manuf. of)
IT Bleaching agents

(hydrogen peroxide, ammonia-metal complex soaps contg.)
IT Soaps
RL: IMF (Industrial manufacture); PREP (Preparation)
(metal, manuf. of)
IT **9005-25-8D**, reaction products with amide group-contg. metal complex soaps
RL: USES (Uses)
(foaming and water retention agents, for metal complex soaps)
IT 7429-90-5D, complexes with ammonia and sodium, salts of fatty acids
7439-95-4D, complexes with ammonia and sodium, salts of fatty acids
7439-98-7D, complexes with ammonia and sodium, salts of fatty acids
7440-21-3D, complexes with ammonia and sodium, salts of fatty acids
7440-23-5D, complexes with ammonia and metals, salts of fatty acids
7440-32-6D, complexes with ammonia and sodium, salts of fatty acids
7440-33-7D, complexes with ammonia and sodium, salts of fatty acids
7440-66-6D, complexes with ammonia and sodium, salts of fatty acids
7440-67-7D, complexes with ammonia and sodium, salts of fatty acids
7664-41-7D, reaction products with metals and sodium hydroxide, salts of fatty acids
RL: USES (Uses)
(industrial and detergent soaps)
IT **9005-25-8D**, reaction products with amide group-contg. metal complex soaps
RL: USES (Uses)
(foaming and water retention agents, for metal complex soaps)
RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 39 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1977:441095 HCAPLUS
DN 87:41095
TI Glue compositions
IN Matsunaga, Kinjiro; Deguchi, Katsuhiko; Nagata, Yukiko; Nakagawa, Yunosuke
PA Kao Soap Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC D06M015-04
CC 46-6 (Surface Active Agents and Detergents)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 52018992	A2	19770212	JP 1975-93958	19750801
PRAI JP 1975-93958		19750801		

AB Glues for clothes having good resistance to soil were prepd. from hydroxypropylated starch [**9005-25-8**], maleic anhydride-styrene copolymer Et ester (I) [39279-98-6], and similar polymers. Thus, a polyester-cotton blend **fabric** treated with a 5% aq. soln. of 80:20 hydroxypropylated starch-I (degree of esterification 0.5) had detergency 82%, compared with **23**% for a similar **fabric** without treatment.
ST starch adhesive textile; styrene copolymer adhesive textile; maleic anhydride adhesive textile
IT Sprays
(adhesives contg. maleic anhydride-styrene copolymer esters and starch,

for textiles)
IT Textiles
(adhesives for, maleic anhydride-styrene coolymer esters contg. hydroxypropylated starch as, laundering-resistant)
IT Esters, uses and miscellaneous
RL: USES (Uses)
(adhesives, contg. starch, for textiles)
IT Adhesives
(maleic anhydride-styrene copolymer esters, contg. starch, for textiles)
IT Laundering
(of textiles, adhesives resistant to, starch and maleic anhydride-styrene copolymer esters as)
IT 60529-54-6
RL: USES (Uses)
(adhesives, contg. carboxymethylated starch, for textiles)
IT 9038-42-0 62712-10-1 68890-83-5
RL: USES (Uses)
(adhesives, contg. hydroxyethoxylated starch, for textiles)
IT 39279-98-6
RL: USES (Uses)
(adhesives, contg. hydroxypropylated starch for textiles)
IT 9002-89-5 9005-25-8D, hydroxypropylated
RL: USES (Uses)
(adhesives, contg. maleic anhydride-styrene copolymer, for textiles)
IT 25549-84-2
RL: USES (Uses)
(adhesives, contg. maleic anhydride-styrene copolymers for textiles)
IT 52503-38-5
RL: USES (Uses)
(adhesives, contg. poly(sodium acrylate), for textiles)
IT 60529-54-6
RL: USES (Uses)
(adhesives, contg. poly(vinyl alc.), for textiles)

L41 ANSWER 40 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1975:499605 HCAPLUS
DN 83:99605
TI Paste material
IN Miyamoto, Akira
PA Japan Food Processing Co., Ltd., Japan
SO Jpn. Tokkyo Koho, 2 pp.
CODEN: JAXXAD
DT Patent
LA Japanese
IC C09J; C08L; C08F; D21H; D04H
CC 43-7 (Cellulose, Lignin, Paper, and Other Wood Products)
Section cross-reference(s): 39
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 50010349	B4	19750421	JP 1969-90	19681228
PRAI JP 1969-90		19681228		

AB Pastes and sizes for corrugated boards, paper, and nonwoven **fabrics** were prepd. from polyacrylamide (I) [9003-05-8] or acrylamide copolymers, mol. wt. 300,000-600,000, contg. monochloroacetic acid [**79-11-8**], and optionally additives such as **starch**, TiO2, kaolin, and synthetic resins. The I size improved the

dry-strength, printability, filler retention, and recycling properties of paper.
ST polyacrylamide chloroacetic acid size; nonwoven **fabric** size polyacrylamide; corrugated board size polyacrylamide
IT Paperboard
(corrugated, sizes for, polyacrylamide-contg.)
IT Textiles
(nonwoven, sizes for, contg. polyacrylamide)
IT Sizes
(polyacrylamide, contg. monochloroacetic acid, for paper and textiles)
IT 9003-05-8
RL: USES (Uses)
(sized, contg. monochloroacetic acid, for corrugated board and nonwoven textiles)
IT 79-11-8, uses and miscellaneous
RL: USES (Uses)
(sizes contg. polyacrylamide and, for corrugated board and nonwoven textiles)

L41 ANSWER 41 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1965:67325 HCAPLUS
DN 62:67325
OREF 62:12008d-f
TI Modified starch
PA W. A. Scholten's Chemische Fabrieken N.V.
SO 3 pp.
DT Patent
LA Unavailable
IC C13L
CC 50 (Industrial Carbohydrates)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI NL 110069		19641215	NL	19541116

AB Starch grains were swelled without destroying their granular structure by suspending in H2O in the presence of macromol. compds. The mixt. contains (calcd. as % of starch) 50% H2O and .gtoreq. 5% macromol. compds.; it is heated to 100-80.degree. and dried. The starch granules are swollen and lose their polarization cross. Suitable raw materials are corn, wheat, cassava, potato, and sago starch and starch derivs. such as thin-cooking starch, monoesterified and monoetherified insol. starch. The macromol. compds. used are sol. starch esters and ethers, **amylopectin**, glucose sirup, sol. cellulose esters and ethers, vegetable gums, and Na alginate. Thus, a mixt. of wheat starch 12,000, H2O 6000, and starch hydroxyalkyl ether 3000 parts is thinly spread on a rotating (2-3 rpm.) hot (130-40.degree.) drum. The heated suspension dries to form a 0.2-0.5 mm.-thick film, which is ground and sieved on a 1.5 mm. screen. This product (I), mixed with 4 parts H2O, gives a stable, viscous suspension contg. swollen, still individual starch granules. To a washing machine contg. **23** kg. freshly laundered lab. and butcher's coats, was added 80 l. H2O and 480 g. I. The dispersion was perfect after 2 min. rotation. After 5 min. mixing, the coats were centrifuged and pressed with steam at 6 atm. The finish was beautiful and not too stiff. The coats did not adhere to the press and the **fabric** dried readily.
IT Esters
(of starch, starch swelling by)
IT Cellulose esters
Cellulose ethers

Gums
Macromolecular compounds
(starch swelling by)
IT Ethers
(starch, starch swelling by)
IT Ammonium, (2,3-epoxypropyl)trimethyl
(starch modified by, gelation by compression and shearing)
IT Amylopectins
Glucose
(starch swelling by)
IT 9005-25-8, Starch
(and derivs., swelling by macromol. compds.)
IT 9005-32-7, Alginic acid
(starch swelling by)